PDRSF 11.3.234.1 V.0
8/19/08

CONOCOPHILLIPS COMPANY ("CONOCOPHILLIPS"),
ON BEHALF OF PHILLIPS PETROLEUM COMPANY,
TOSCO CORPORATION AND ASSETS OF 76 PRODUCTS COMPANY

RESPONSES TO JANUARY 18, 2008
EPA FIRST REQUEST FOR INFORMATION
PORTLAND HARBOR SUPERFUND SITE
PORTLAND, OREGON

HYDROLOGIC ANALYSIS FOR ESTIMATING STORMWATER RUNOFF VOLUMES AND STORMWATER POLLUTION CONTROL PLAN (SWPCP) AND SPILL PREVENTION, CONTROL AND COUNTERMEASURES (SPCC)

RESPONSE TO QUESTION 19

October 2, 2007

7-61M-11670-0

Mr. William H. Collins
ConocoPhillips
5528 NW Doane Ave.
Portland, Oregon 97210

Dear Mr. Collins:

Re: Hydrologic Analysis for Estimating Stormwater Runoff Volumes
Stormwater Separators 001, 002 and 004
Portland Terminal, Portland, Oregon

This letter describes a focused hydrologic analysis for estimating the volume of stormwater runoff passing through three stormwater separators located at the ConocoPhillips Portland Terminal, 5528 NW Doane Avenue in Portland, Oregon (referred to herein as the "Site"). The Portland Terminal includes three separate fuel storage areas designated as Tank Farms 1, 2 and 3. Stormwater runoff inside each tank farm is collected and conveyed, separate from terminal process water, to one of the three stormwater separators before discharging to the municipal storm sewer system under a National Pollutant Discharge Elimination System (NPDES) 1200-Z general permit. Each active stormwater separator (labeled OWS #001, OWS #002 and OWS #004) consists of below-grade concrete vaults equipped with inverted weirs designed to separate out light non-aqueous phase liquids (LNAPL) in the event of a petroleum release impacting stormwater runoff. As part of its NPDES discharge monitoring requirements, ConocoPhillips must assess the quantity and quality of stormwater runoff exiting its facility. AMEC Earth & Environmental, Inc. (AMEC) developed a method for estimating the quantity of stormwater from on-site measurements of rainfall using the procedures outlined in Chapter 6 of the 2006 City of Portland Sewer and Drainage Facilities Design Manual.

FOCUSED HYDROLOGIC ANALYSIS

AMEC contacted and obtained drainage plans (Attachment A) from Alpha Engineering and Associates, Inc. (Alpha) for each of the Portland Terminal tank farms. These plans included a description of ground cover conditions and the lateral dimensions within each drainage area. On August 10 and September 26, 2007, AMEC conducted qualitative site inspections of each drainage area and stormwater separator to assess the following physical characteristics: (a) dimensions and size; (b) distribution of impervious and pervious surfaces; (c) characteristics of any pervious surfaces (i.e., soil type); (d) length and slope of drainage paths; and (e) the presence of any stormwater storage/detention/conveyance features.

AMEC Earth & Environmental, Inc.
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Portland, Oregon
USA 97224
Tel +1 (503) 639-3400
Fax +1 (503) 620-7892
www.amec.com

Using the above information, the Rational Hydrologic Method (City of Portland, Bureau of Environmental Services, Sewer and Drainage Facilities Design Manual, Chapter 6), and professional judgment, AMEC developed runoff coefficients ranging between 0.01 and 0.9 for converting precipitation into runoff based on the observed physical characteristics within the drainage basins. At the time of our site visits, the ground surface encountered in the tank farms generally consisted of semi-compact gravel and sand. It is important to note that all stormwater runoff from the aboveground steel tanks is directed to the pervious surface surrounding each tank. In general, the topographic surface inside each tank farm is flat. Concrete walls surrounding each tank farm control the flow of runoff and form distinct drainage areas. Only the stormwater separator located inside Tank Farm 1 (OWS #002) appears to be connected to select asphalt-paved areas located outside the containment walls.

Pervious and impervious surface areas contributing stormwater runoff flow to the separators were calculated from the drainage plans using computer aided design (CAD) software and are illustrated in Figure 1. The size of drainage areas contributing stormwater runoff to OWS #001, OWS #2 and OWS #4 are 143,336 square feet, 116,085 square feet, and 154,563 square feet, respectively. In addition to the stormwater encatchment areas, Figure 1 illustrates the locations and size of separate process water management areas. The process water management areas drain to an oil-water separator system (OWS #003) that is completely separate from the stormwater separators discussed in this letter. Subsequently, these process water management areas were subtracted from the above-mentioned stormwater drainage areas calculated above.

Using the Rational Method runoff coefficients and the calculated surface areas, AMEC estimated the volume of stormwater runoff resulting from 0.25 to 1 inches of precipitation into each separate tank farm (Table 1). A linear relationship between runoff and precipitation has been presented graphically in Figure 2. Rain gauges are present in each tank farm and its data is recorded daily. We recommend that ConocoPhillips use this rain gage data and the graphs in Figure 2 to approximate the quantity of stormwater runoff passing through the stormwater separators when preparing its NPDES discharge monitoring reports.

LIMITATIONS

It is important to understand that there are limitations to the hydrologic analyses used in the City's Sewer and Drainage Facilities Design Manual and that its result is only an approximation of natural phenomena and processes. The relationship between the precipitation falling on a surface and the amount of runoff produced is complex and too little data are likely available on all factors influencing the rainfall-runoff relationship to expect exact solutions. To that end, AMEC used technical judgment when applying the Rational Method.

This letter was prepared exclusively for ConocoPhillips by AMEC Earth & Environmental, Inc. The quality of information contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions and qualifications set forth in this document. This focused hydrologic analysis is intended to be used by ConocoPhillips for the Portland Terminal only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

The findings contained herein are relevant to the dates of the AMEC site visits and should not be relied upon to represent conditions at later dates. In the event that changes in the nature, usage, or layout of the tank farms are made, the conclusions and recommendations contained in this report may not be valid. If additional information becomes available, it should be provided to AMEC so the original analysis can be modified as necessary.

CLOSING

We appreciate the opportunity to work for you. Please feel free to contact the undersigned at (503) 639-3400 if you have any questions.

Sincerely,

AMEC Earth & Environmental, Inc.

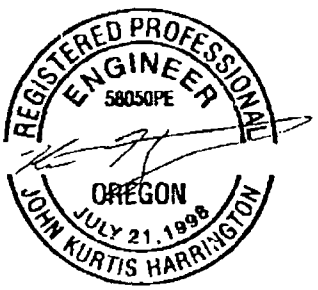
Lance Johnson, PE
Senior Mechanical Engineer

Kurt Harrington, PE, PMP
Associate

Attachments:

Table 1 – Estimates of Stormwater Flow Into OWS-001, OWS-002, and OWS-004
Figure 1 – Pervious and Impervious Surface Areas Contributing Flow to Stormwater Separators
Figure 2 - Estimates of Stormwater Flow Into OWS-001, OWS-002, and OWS-004
Attachment A – Drainage Plans

JKH/sl



Expires: 06/30/2009

TABLE

TABLE 1

Estimates of Stormwater Flow into OWS-001, OWS-002 and OWS-004
ConocoPhillips - Portland Terminal

Area Description	Estimated Surface Area (ft^2)	Run-off coefficients	Estimated Stormwater Run-off Vol per Quarter Inch of Precipitation							
			0.25 Inches		0.5 inches		0.75 Inches		1 Inch	
			cubic feet	gallons	cubic feet	gallons	cubic feet	gallons	cubic feet	gallons
Tank Farm #1										
Gravel Areas and Tanks	122,558.6	*0.01*	25.5	191.0	51.1	382.0	76.6	573.0	102.1	763.9
Paved areas that drain to Sanitary Sewer	-30,726.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paved areas that drain to Storm Sewer	24,045.0	*0.9*	450.8	3,372.3	901.7	6,744.6	1,352.5	10,116.9	1,803.4	13,489.2
Storm Separator 2 area	207.0	1.0	4.3	32.3	8.6	64.5	12.9	96.8	17.3	129.0
Totals	***116,084.5***		***480.7***	***3,595.6***	***961.4***	***7,191.1***	***1,442.1***	***10,786.7***	***1,922.8***	***14,382.2***
Tank Farm #2										
Gravel Areas and Tanks	154,320.4	*0.02*	64.3	481.0	128.6	961.9	192.9	1,442.9	257.2	1,923.9
Paved areas that drain to Sanitary Sewer	-1,472.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paved areas that drain to Storm Sewer	1,040.5	*0.9*	19.5	145.9	39.0	291.9	58.5	437.8	78.0	583.7
Storm Separator 4 area	675.0	1.0	14.1	105.2	28.1	210.4	42.2	315.6	56.3	420.8
Totals	***154,563.3***		***97.9***	***732.1***	***195.7***	***1,464.2***	***293.6***	***2,196.2***	***391.5***	***2,928.3***
Tank Farm #3										
Gravel Areas and Tanks	166,818.4	*0.04*	139.0	1,039.8	278.0	2,079.7	417.0	3,119.5	556.1	4,159.4
Paved areas that drain to Sanitary Sewer	-24,207.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paved areas that drain to Storm Sewer	0	*0.9*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Storm Separator 1 area	724.0	1.0	15.1	112.8	30.2	225.6	45.3	338.5	60.3	451.3
Totals	***143,335.7***		***154.1***	***1,152.7***	***308.2***	***2,305.3***	***462.3***	***3,458.0***	***616.4***	***4,610.7***

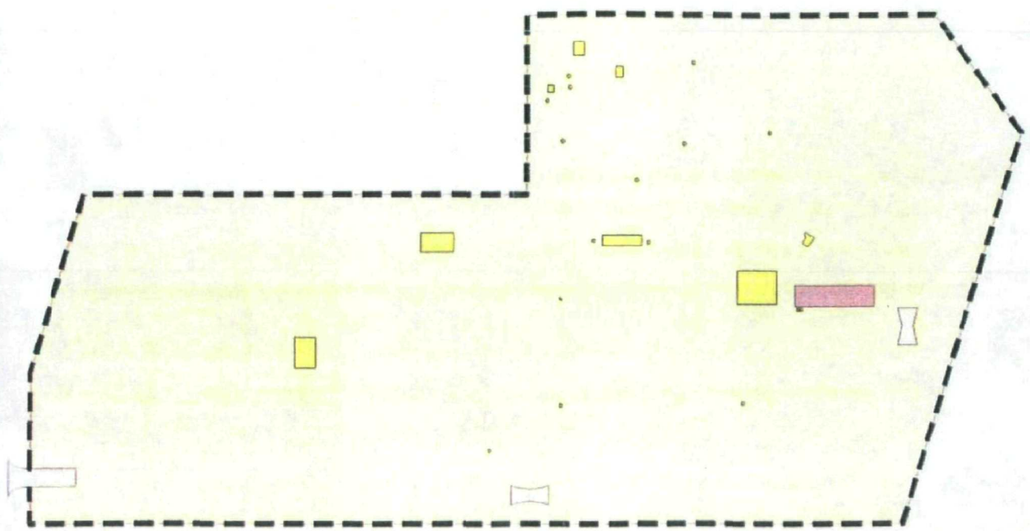
FIGURES

COPPOR00000526

Tank Farm 1

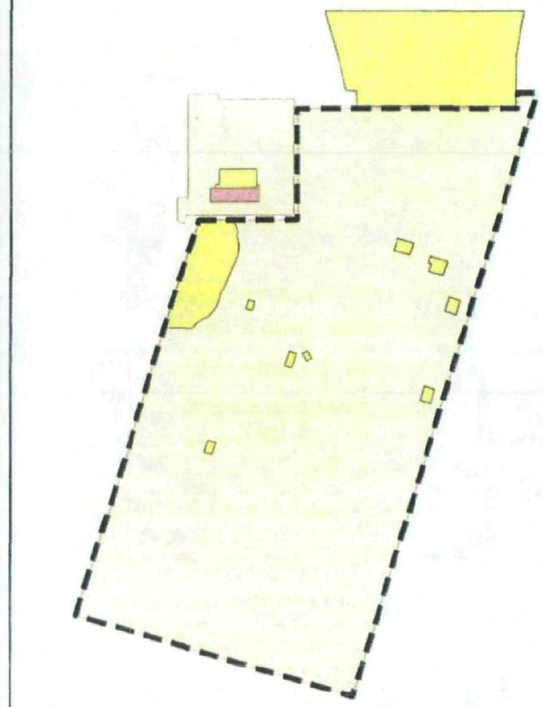
Surface Description	Surface Area (ft)
ASPHALT	24,045
DRAINAGE TO SANITARY	30,726.1
GRAVEL	122,351.6
STORMWATER SEPARATORS	207

Tank Farm 2



Surface Description	Surface Area (ft)
DRAINAGE TO SANITARY	1,472.6
GRAVEL	153,645.4
ASPHALT	1,040.5
STORMWATER SEPARATORS	675

Tank Farm 3



Surface Description	Surface Area (ft)
DRAINAGE TO SANITARY	24,207.7
GRAVEL	166,095.7
STORMWATER SEPARATORS	724

Legend

- CONCRETE CONTAINMENT WALL
- ASPHALT
- DRAINAGE TO SANITARY
- GRAVEL
- STORMWATER SEPARATORS

CLIENT LOGO

CLIENT: CONOCOPHILLIPS COMPANY

AMEC Earth & Environmental
7376 SW Durham Road
Portland, OR, U.S.A. 97224

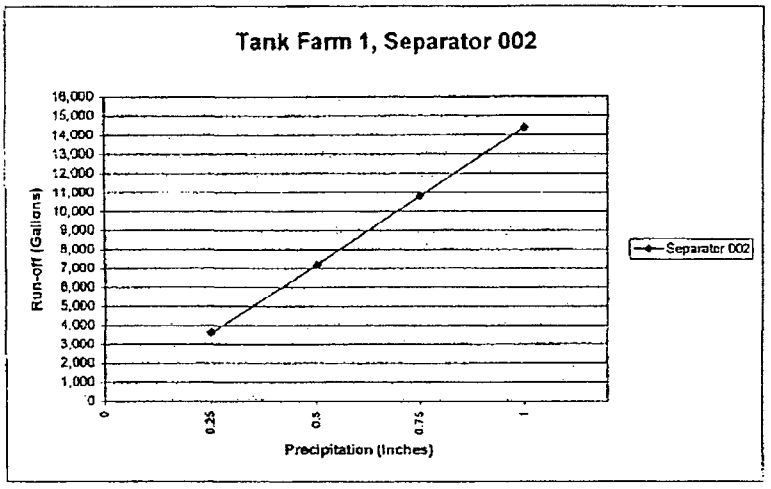
DWN BY:	PM
CHK'D BY:	JE
DATUM:	X
PROJECTION:	X
SCALE:	N/A

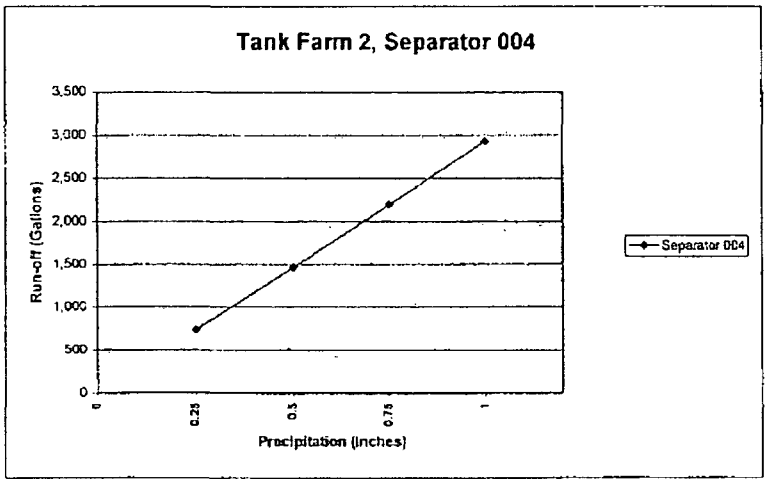
PROJECT: PORTLAND TERMINAL

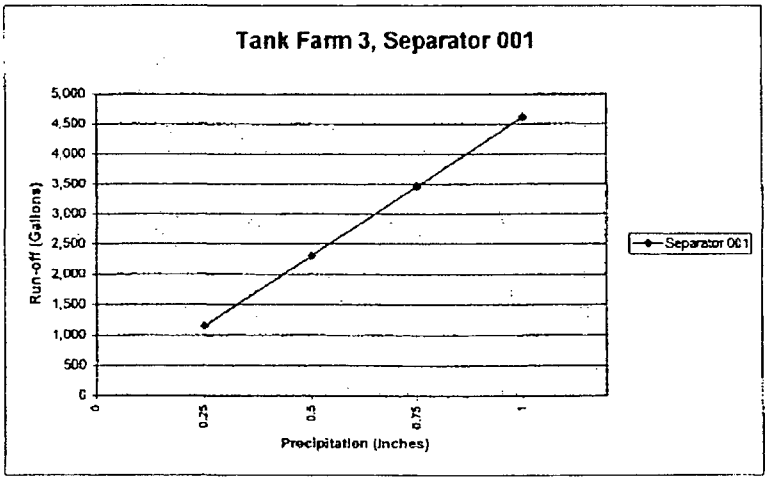
TITLE: PERVIOUS AND IMPERVIOUS SURFACE AREAS CONTRIBUTING FLOW TO STORMWATER SEPARATORS

DATE:	OCTOBER 2007
PROJECT NO.:	761M116700
REV. NO.:	1
FIGURE NO.:	1

Figure 2
Estimates of Stormwater Flow into OWS-001, OWS-002 and OWS-004
ConocoPhillips - Portland Terminal



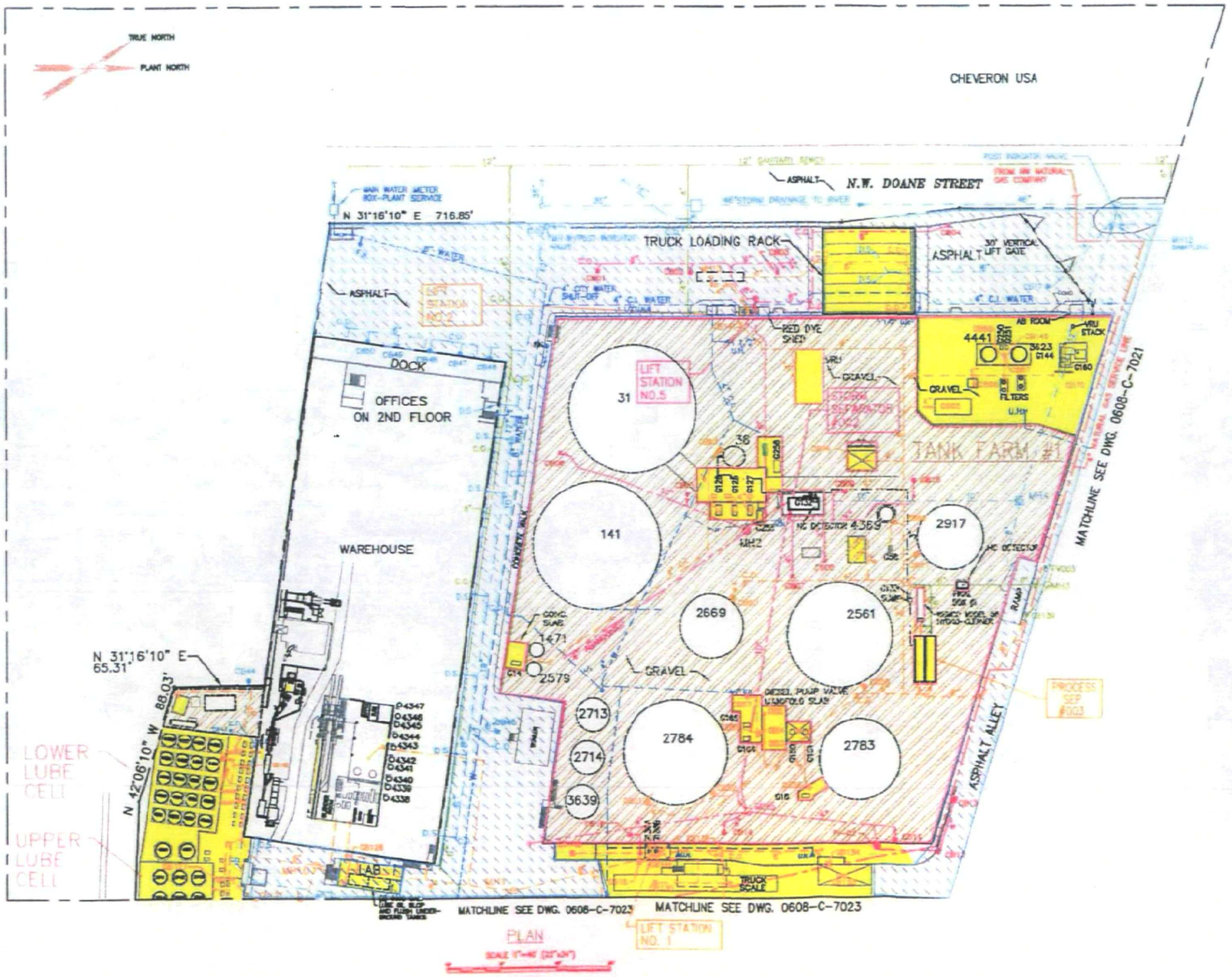




amec

ATTACHMENT A

Drainage Plans

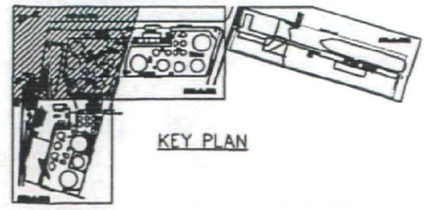


PLAN

SCALE 1"=40' (22"x34")

LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- RECOVERED OIL TO STORAGE
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- ROOF AREAS
- PAVED AREAS
- GRAVEL/SOIL AREAS
- PROCESS WATER DIRECTED TO SANITARY SEWER



KEY PLAN

DRAWING NO.	REFERENCE DRAWINGS
0608-C-7021	TANK FARM NO.2 GENERAL ARRANGEMENT
0608-C-7023	TANK FARM NO.3 GENERAL ARRANGEMENT

REV NO.	DATE	REVISED	DRAWN BY	CKD BY
A	03/06/97	FOR REVIEW AND COMMENT	DAB	MK
B	03/26/97	GENERAL UPDATE	DAB	MK
C	07/24/97	REVISE STORM DRAINAGE LEGEND	DAB	MK
D	02/12/98	UPDATED FOR SWPCP	DAB	SM
E	09/10/98	UPDATED TO REFLECT CHANGES ON DWG. 0608-C-7000	DAB	SM
F	3/14/03	REMOVED FIGURE NUMBER AND REVISED LOGO	DKB	MHB

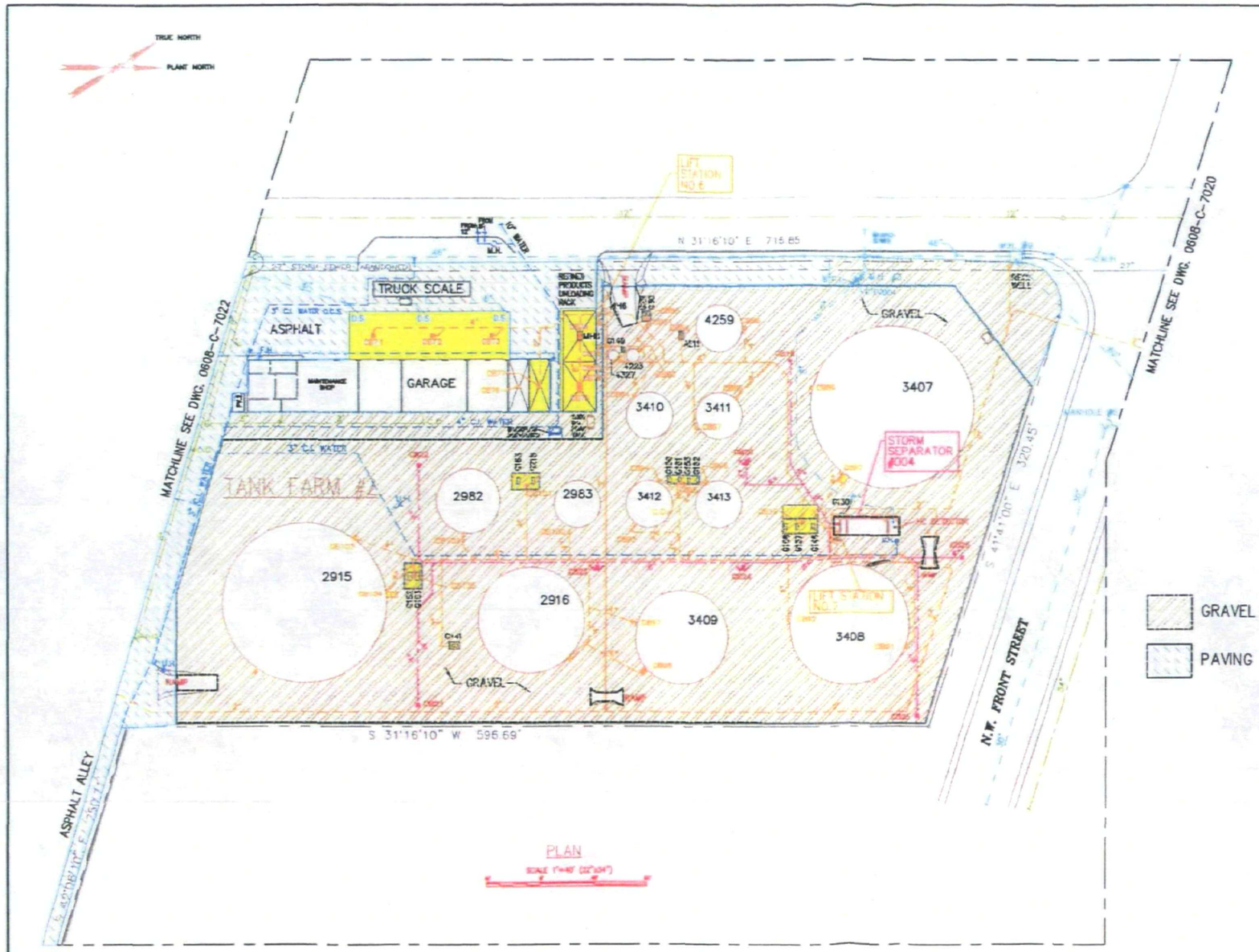
ConocoPhillips
5528 N.W. DOANE AVE., PORTLAND, OREGON 97210

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2828 SW 29th AVE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

DRAWN BY	D.A.BYNUM
CHKD BY	MK
APPD BY	K.JP
SCALE	AS SHOWN
DATE	03/16/97

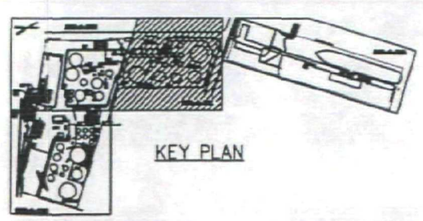
PORTLAND TERMINAL
PORTLAND, OREGON
AREA 1
STORM WATER & SANITARY WATER DRAINAGE

DRAWING NO.	SHEET	REV.
PORT-C-7022	1 OF 1	F



LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- RECOVERED OIL TO STORAGE
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- GRAVEL AREAS
- PAVING
- UNTREATED DRAINAGE
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #004
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003



KEY PLAN

DRAWING NO.	REFERENCE DRAWINGS
0608-C-7020	DOCK FACILITIES GENERAL ARRANGEMENT
0608-C-7022	TANK FARM NO.1 GENERAL ARRANGMENT

REV. NO.	DATE	REVISED	DRAWN BY	CKD. BY
A	03/06/97	FOR REVIEW AND COMMENT	DAB	MK
B	03/26/97	GENERAL UPDATE	DAB	MK
C	07/24/97	REVISE STORM DRAINAGE LEGEND	DAB	MK
D	02/12/98	UPDATED FOR SWPCP	DAB	SM
E	09/10/99	UPDATED TO REFLECT CHANGES ON DWG. 0608-C-7000	DAB	SM
F	3/14/03	REMOVED FIGURE NUMBER AND REVISED LOGO	QKB	WHB

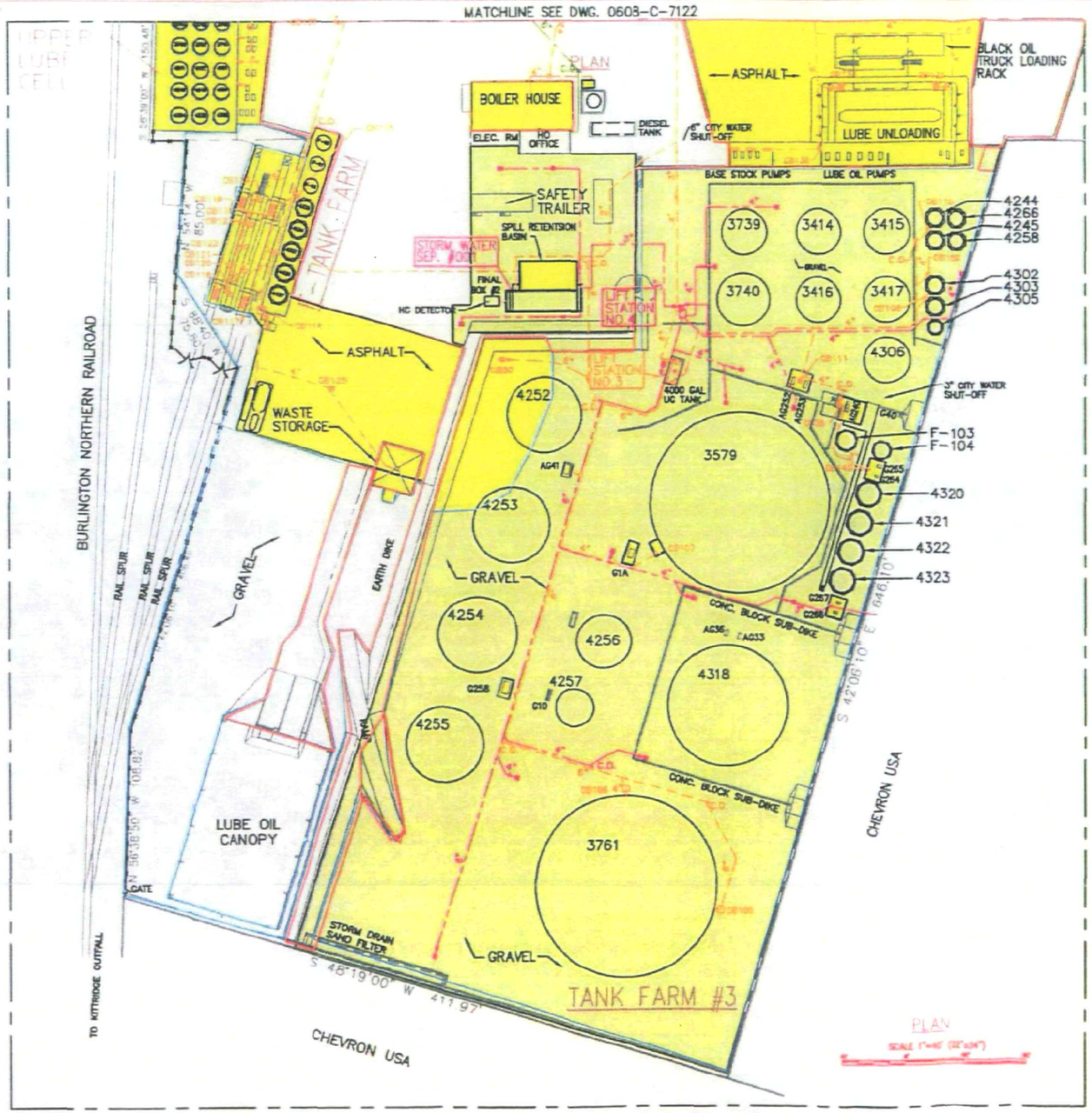
ConocoPhillips
5528 N.W. DOANE AVE., PORTLAND, OREGON 97210

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29th AVE, SUITE 204, PORTLAND, OR, 97210 Tel:(503)227-3317/Fax:(503)227-3244

DRAWN BY	D.A.BYNUM
CHKD BY	MK
APPD BY	K.P
SCALE	AS SHOWN
DATE	03/16/97

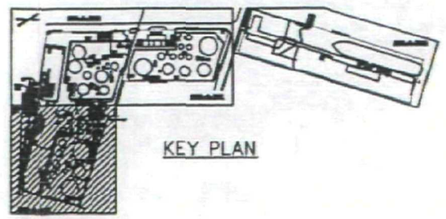
PORTLAND TERMINAL
PORTLAND, OREGON
TANK FARM 2
SITE DRAINAGE PLAN

DRAWING NO.	SHEET	REV.
0608-C-7021	1 OF 1	F



LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- UNTREATED DRAINAGE
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #001
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003
- GRAVEL AREAS
- PAVING



KEY PLAN

DRAWING NO.	REFERENCE DRAWINGS
0608-C-7021	TANK FARM NO.1 GENERAL ARRANGEMENT

REV. NO.	DATE	REVISED	DRAWN BY	CHKD BY
G	11/22/04	ADDED LUBE OIL CANOPY AND WASTE STORAGE	QKB	WHB
B	03/26/97	GENERAL UPDATE	DAB	MK
C	07/24/97	REVISE STORM DRAINAGE LEGEND	DAB	MK
D	02/12/98	UPDATED FOR SWPCP	DAB	SM
E	06/10/99	UPDATED TO REFLECT CHANGES ON DWG.0608-C-7000	DAB	SM

ConocoPhillips
5528 N.W. DOANE AVE., PORTLAND, OREGON 97210

ALPHA ENGINEERS and CONSTRUCTORS, INC.

DRAWN BY D.A.BYNUM
CHKD BY MK
APPD BY K.JP
SCALE AS SHOWN
DATE 03/26/97

PORTLAND TERMINAL
PORTLAND, OREGON
TANK FARM 3
SITE DRAINAGE PLAN

DRAWING NO. 0608-C-7023 SHEET 1 OF 1 REV. G

Portland Terminal
(Facility Name)

5528 NW Doane Avenue, Portland, Oregon 97210 (Multnomah County)
(Facility Location)

122° 13'15" W / 45° 34' 20" N
(Facility Longitude/Latitude))

ConocoPhillips Company
(Operator Name)

600 N. Dairy Ashford Road
(Address)

Houston, Texas 77079
(City, State, Zip)

ConocoPhillips Company
(Owner Name)

600 N. Dairy Ashford Road
(Address)

Houston, Texas 77079
(City, State, Zip)

TABLE OF CONTENTS

TABLE OF CONTENTS (Cont'd)

APPENDICES

LOG OF PLAN REVIEW AND AMENDMENTS

NON TECHNICAL AMENDMENTS

- Non-technical amendments are not certified by a Professional Engineer.
- Examples of changes include, but are not limited to, phone numbers, name changes, or any non-technical text change(s).

TECHNICAL AMENDMENTS

- Technical amendments are certified by a Professional Engineer (§112.5(c)).
- Examples of changes include, but are not limited to, the following if they substantially affect containment or discharge: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacements, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or addition/deletion of standard operation or maintenance procedures related to discharge prevention measures. It is the responsibility of the facility to determine, and confirm with the regulatory authority as necessary, what constitutes a technical amendment. The preamble of the rule states that an amendment is required only "when there is a change that *materially affects the facility's potential to discharge oil*" (67 FR 47091).
- An amendment made under this section will be prepared within six (6) months of the change and implemented as soon as possible but not later than six (6) months following preparation of the amendment.
- Technical Amendments affecting various pages within the plan can be P.E. certified on those pages, certifying those amendments only, and will be documented on the log form below.

MANAGEMENT REVIEW

- Management will review this SPCC Plan at least each five (5) years and document the review on the form below (§112.5(b)).

Review/ Amend Date	Signature* (Specify)	Amend Plan (will/will not)	Description of Review Amendment	Affected Page(s)	P.E. Certification (Y/N)
2/18/03			New SPCC format	All	(Y)
2/6/07			Remove 2 tanks	All	(Y)
4/08	Tom Lyons	Will	Updated phone #'s, tank info, text, and P&ID's	All	(N)

* Typically signed by Manager, Professional Engineer or plan reviewer.

☐ ONSHORE FACILITY - REGULATORY CROSS-REFERENCE

Citation	Description	Section
§112.3(d)(1)	Professional Engineer Certification	1.2
§112.5(b)	Management of Five Year Review	Foreword
§112.7	General requirements for SPCC Plans for all facilities and all oil types	-----
§112.7(a)	General requirements: discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures	1, 2, App. A-D
§112.7(b)	Fault analysis	2A.1
§112.7(c)	Secondary containment	2A.1, 2A.3.1
§112.7(d)	Contingency planning	App. D
§112.7(e)	Inspections, tests, and records	2A.5.3, 2A.7, App. B
§112.7(f)	Employee training and discharge prevention procedures	1.6, App. A, App. B
§112.7(g)	Security (excluding oil production facilities)	2A.4.2, 2A.6
§112.7(h)	Loading/unloading (excluding offshore facilities)	2A.5
§112.7(i)	Brittle fracture evaluation requirements	2A.7
§112.7(j)	Conformance with State requirements	1.11
§112.8	Requirements for onshore facilities (excluding production facilities)	-----
§112.8(a)	General and specific requirements	2A.1 - 2A.4, 2A.7
§112.8(b)	Facility drainage	2A.3
§112.8(c)	Bulk storage containers	2A.1, 2A.2, 2A.7
§112.8(d)	Facility transfer operations, pumping, and facility process	2A.4, 2.A.7
§112.9	Requirements for onshore production facilities	N/A
§112.9(a)	General and specific requirements	N/A
§112.9(b)	Oil production facility drainage	N/A
§112.9(c)	Oil production facility bulk storage containers	N/A
§112.9(d)	Facility transfer operations, oil production facility	N/A
§112.10)	Requirements for onshore oil drilling and workover facilities	N/A
§112.10(a)	General and specific requirements	N/A
§112.10(b)	Mobile facilities	N/A
§112.10(c)	Secondary containment - catchment basins or diversion structures	N/A
§112.10(d)	Blowout prevention (BOP)	N/A
§112.11	Requirements for offshore oil drilling, production, or workover facilities	N/A
§112.11(a)	General and specific procedures	N/A
§112.11(b)	Facility drainage	N/A
§112.11(c)	Sump systems	N/A
§112.11(d)	Discharge prevention systems for separators and treaters	N/A
§112.11(e)	Atmospheric storage or surge containers; alarms	N/A
§112.11(f)	Pressure containers; alarm systems	N/A
§112.11(g)	Corrosion protection	N/A
§112.11(h)	Pollution prevention system procedures	N/A
§112.11(i)	Pollution prevention systems; testing and inspection	N/A
§112.1(j)	Surface and subsurface well shut-in valves and devices	N/A
§112.11(k)	Blowout prevention	N/A
§112.11(l)	Manifolds	N/A
§112.11(m)	Flowlines, pressure sensing devices	N/A
§112.11(n)	Piping; corrosion protection	N/A
§112.11(o)	Sub-marine piping; environmental stresses	N/A
§112.11(p)	Inspections of sub-marine piping	N/A

☐ ONSHORE OIL PRODUCTION FACILITY - REGULATORY CROSS-REFERENCE

Citation	Description	Section
§112.3(d)(1)	Professional Engineer Certification	1.2
§112.5(b)	Management of Five Year Review	Foreword
§112.7	General requirements for SPCC Plans for all facilities and all oil types	---
§112.7(a)	General requirements: discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures	1, 2, App. A-D
§112.7(b)	Fault analysis	2B.1
§112.7(c)	Secondary containment	2B.1, 2B.3
§112.7(d)	Contingency planning	App. D
§112.7(e)	Inspections, tests, and records	2B.6
§112.7(f)	Employee training and discharge prevention procedures	1.6, App. A, App. B
§112.7(g)	Security (excluding oil production facilities)	N/A
§112.7(h)	Loading/unloading (excluding offshore facilities)	2B.5
§112.7(i)	Brittle fracture evaluation requirements	2B.6
§112.7(j)	Conformance with State requirements	1.11
§112.8	*Requirements for onshore facilities (excluding production facilities)*	N/A
§112.8(a)	General and specific requirements	N/A
§112.8(b)	Facility drainage	N/A
§112.8(c)	Bulk storage containers	N/A
§112.8(d)	Facility transfer operations, pumping, and facility process	N/A
§112.9	Requirements for onshore production facilities	---
§112.9(a)	General and specific requirements	2B.1 - 2B.4, 2B.6
§112.9(b)	Oil production facility drainage	2B.3
§112.9(c)	Oil production facility bulk storage containers	2B.1, 2B.2
§112.9(d)	Facility transfer operations, oil production facility	2B.4
§112.10)	Requirements for onshore oil drilling and workover facilities	N/A
§112.10(a)	General and specific requirements	N/A
§112.10(b)	Mobile facilities	N/A
§112.10(c)	Secondary containment - catchment basins or diversion structures	N/A
§112.10(d)	Blowout prevention (BOP)	N/A
§112.11	Requirements for offshore oil drilling, production, or workover facilities	N/A
§112.11(a)	General and specific procedures	N/A
§112.11(b)	Facility drainage	N/A
§112.11(c)	Sump systems	N/A
§112.11(d)	Discharge prevention systems for separators and treaters	N/A
§112.11(e)	Atmospheric storage or surge containers; alarms	N/A
§112.11(f)	Pressure containers; alarm systems	N/A
§112.11(g)	Corrosion protection	N/A
§112.11(h)	Pollution prevention system procedures	N/A
§112.11(i)	Pollution prevention systems; testing and inspection	N/A
§112.1(j)	Surface and subsurface well shut-in valves and devices	N/A
§112.11(k)	Blowout prevention	N/A
§112.11(l)	Manifolds	N/A
§112.11(m)	Flowlines, pressure sensing devices	N/A
§112.11(n)	Piping; corrosion protection	N/A
§112.11(o)	Sub-marine piping; environmental stresses	N/A
§112.11(p)	*Inspections of sub-marine piping*	N/A

☐ ONSHORE OIL DRILLING AND WORKOVER FACILITY - REGULATORY CROSS-REFERENCE

Citation	Description	Section
§112.3(d)(1)	Professional Engineer Certification	1.2
§112.5(b)	Management of Five Year Review	Foreword
§112.7	General requirements for SPCC Plans for all facilities and all oil types	----
§112.7(a)	General requirements: discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures	1, 2, App. A-D
§112.7(b)	Fault analysis	2C.1
§112.7(c)	Secondary containment	2C.1, 2C.3
§112.7(d)	Contingency planning	App. D
§112.7(e)	Inspections, tests, and records	2C.5
§112.7(f)	Employee training and discharge prevention procedures	1.6, App. A, App. B
§112.7(g)	Security (excluding oil production facilities)	N/A
§112.7(h)	Loading/unloading (excluding offshore facilities)	2C.5
§112.7(i)	Brittle fracture evaluation requirements	2C.6
§112.7(j)	Conformance with State requirements	1.11
§112.8	Requirements for onshore facilities (excluding production facilities)	N/A
§112.8(a)	General and specific requirements	N/A
§112.8(b)	Facility drainage	N/A
§112.8(c)	Bulk storage containers	N/A
§112.8(d)	Facility transfer operations, pumping, and facility process	N/A
§112.9	Requirements for onshore production facilities	N/A
§112.9(a)	General and specific requirements	N/A
§112.9(b)	Oil production facility drainage	N/A
§112.9(c)	Oil production facility bulk storage containers	N/A
§112.9(d)	Facility transfer operations, oil production facility	N/A
§112.10)	Requirements for onshore oil drilling and workover facilities	----
§112.10(a)	General and specific requirements	2C.1 - 2C.4, 2C.6
§112.10(b)	Mobile facilities	2C.2
§112.10(c)	Secondary containment - catchment basins or diversion structures	2C.3
§112.10(d)	Blowout prevention (BOP)	2C.4
§112.11	Requirements for offshore oil drilling, production, or workover facilities	N/A
§112.11(a)	General and specific procedures	N/A
§112.11(b)	Facility drainage	N/A
§112.11(c)	Sump systems	N/A
§112.11(d)	Discharge prevention systems for separators and treaters	N/A
§112.11(e)	Atmospheric storage or surge containers; alarms	N/A
§112.11(f)	Pressure containers; alarm systems	N/A
§112.11(g)	Corrosion protection	N/A
§112.11(h)	Pollution prevention system procedures	N/A
§112.11(i)	Pollution prevention systems; testing and inspection	N/A
§112.1(j)	Surface and subsurface well shut-in valves and devices	N/A
§112.11(k)	Blowout prevention	N/A
§112.11(l)	Manifolds	N/A
§112.11(m)	Flowlines, pressure sensing devices	N/A
§112.11(n)	Piping; corrosion protection	N/A
§112.11(o)	Sub-marine piping; environmental stresses	N/A
§112.11(p)	Inspections of sub-marine piping	N/A

☐ OFFSHORE OIL DRILLING, PRODUCTION, OR WORKOVER FACILITY – REGULATORY CROSS-REFERENCE

Citation	Description	Section
§112.3(d)(1)	Professional Engineer Certification	1.2
§112.5(b)	Management of Five Year Review	Foreword
§112.7	General requirements for SPCC Plans for all facilities and all oil types	---
§112.7(a)	General requirements: discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures	1, 2, App. A-D
§112.7(b)	Fault analysis	2D.1
§112.7(c)	Secondary containment	2D.1
§112.7(d)	Contingency planning	App. D
§112.7(e)	Inspections, tests, and records	2D.4
§112.7(f)	Employee training and discharge prevention procedures	1.6 App. A, App. B
§112.7(g)	Security (excluding oil production facilities)	N/A
§112.7(h)	Loading/unloading (excluding offshore facilities)	N/A
§112.7(i)	Brittle fracture evaluation requirements	2D.4
§112.7(j)	Conformance with State requirements	1.11
§112.8	Requirements for onshore facilities (excluding production facilities)	N/A
§112.8(a)	General and specific requirements	N/A
§112.8(b)	Facility drainage	N/A
§112.8(c)	Bulk storage containers	N/A
§112.8(d)	Facility transfer operations, pumping, and facility process	N/A
§112.9	Requirements for onshore production facilities	N/A
§112.9(a)	General and specific requirements	N/A
§112.9(b)	Oil production facility drainage	N/A
§112.9(c)	Oil production facility bulk storage containers	N/A
§112.9(d)	Facility transfer operations, oil production facility	N/A
§112.10)	Requirements for onshore oil drilling and workover facilities	N/A
§112.10(a)	General and specific requirements	N/A
§112.10(b)	Mobile facilities	N/A
§112.10(c)	Secondary containment - catchment basins or diversion structures	N/A
§112.10(d)	Blowout prevention (BOP)	N/A
§112.11	Requirements for offshore oil drilling, production, or workover facilities	-----
§112.11(a)	General and specific procedures	2D.1 - 2D.4
§112.11(b)	Facility drainage	2D.3.1
§112.11(c)	Sump systems	2D.3.2
§112.11(d)	Discharge prevention systems for separators and treaters	2D.2.1
§112.11(e)	Atmospheric storage or surge containers; alarms	2D.2.2
§112.11(f)	Pressure containers; alarm systems	2D.2.2
§112.11(g)	Corrosion protection	2D.2.2
§112.11(h)	Pollution prevention system procedures	2D.3.2
§112.11(i)	Pollution prevention systems; testing and inspection	2D.4
§112.1(j)	Surface and subsurface well shut-in valves and devices	2D.2.7
§112.11(k)	Blowout prevention	2D.2.8
§112.11(l)	Manifolds	2D.2.3
§112.11(m)	Flowlines, pressure sensing devices	2D.2.4
§112.11(n)	Piping; corrosion protection	2D.2.5
§112.11(o)	Sub-marine piping; environmental stresses	2D.2.6
§112.11(p)	Inspections of sub-marine piping	2D.4

Section 1
General Information

1.0 General Information

1.1 Management Approval and Review

Management Approval

Owner/Operator responsible for Facility: ConocoPhillips Company

- Facility Name and Location: Portland Terminal
  5528 NW Doane Avenue, Portland, Oregon 97210
  (Multnomah County)

- This SPCC Plan will be implemented as herein described.

Signature: Tom Lyons

Designated person accountable for oil spill prevention at the facility:

Name: Tom Lyons
Date:
Title: Facility Supervisor

Name: Tom Lyons
Title: Facility Supervisor

- This SPCC Plan will be implemented as herein described.

Signature: Gary LeFebvre

Designated person accountable for oil spill prevention at the facility:

Name: Gary LeFebvre
Date: 4-23-08
Title: Lubricants Plant Supervisor

Name: Gary LeFebvre
Title: Lubricants Plant Supervisor

1.2 Professional Engineer Certification

Professional Engineer Certification

By means of this Professional Engineer Certification, I hereby attest to the following:

- I am familiar with the requirements of 40 CFR Part 112 and have verified that this Plan has been prepared in accordance with the requirements of this Part.
- I or my agent have visited and examined the facility(s).
- I have verified that this Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards.
- I have verified, to my best understanding and knowledge, that the required inspection and testing procedures have been established as described in Section 2.
- I have verified that the Plan, to my best understanding and knowledge, is adequate for the facility.

REGISTERED PROFESSIONAL ENGINEER 18815PE OREGON NOV. 12, 1985 WILLIAM H. BISHOP

(Seal) EXPIRES: 2-1-08

WILLIAM H. BISHOP

Printed Name of Registered Professional Engineer

Signature of Registered Professional Engineer

Date: 2-6-07

Registration No.: 18815PE State: Oregon

1.3 Substantial Harm Certification (excerpt from 40 CFR Part 112 - Attachment CII)

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

FACILITY NAME: Portland Terminal
FACILITY ADDRESS: 5528 NW Doane Avenue
Portland, Oregon 97210 (Multnomah County)

1. Does the facility transfer oil over water to or from vessels ***and*** does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   ☒ YES ☐ NO

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area? ☐ YES ☒ NO

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan. ☒ YES ☐ NO

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake2? ☐ YES ☒ NO

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years? ☐ YES ☒ NO

CERTIFICATION
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Tom Lyons
Signature

Facility Supervisor
Title

Tom Lyons
Name (please type or print)

4-14-2008
Date

Signature

Lubricants Plant Supervisor
Title

Gary LeFebvre
Name (please type or print)

4-21-08
Date

1 If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

2 For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

1.4 Contact List and Phone Numbers

The contact list and phone number reference for the facility is provided as follows (check as appropriate):

☒ Contact List and Phone Number reference is provided in Appendix A.
☒ Emergency Notification Phone List is provided in the Facility Response Plan (FRP): _____

1.5 Notification Data Sheet

A Notification Data Sheet is provided as follows (check as appropriate):

☒ Notification Data Sheet and Sample Qualified Event Sheet are provided in Appendix A.
☒ Notification Data Sheet Form provided in the Facility Response Plan (as described in Section 1.4).

1.6 Personnel, Training, and Discharge Prevention Procedures

Training

- The Facility provides the following minimum training to oil-handling personnel prior to assignment of job responsibilities:

- Operation and maintenance of equipment to prevent oil discharges;
- Oil discharge procedure protocols;
- Applicable oil spill prevention (State & Federal) laws, rules, and regulations;
- General facility operations; and,
- The contents of the facility SPCC Plan and applicable pollution control laws, rules, and regulations.

The training program is further described as follows: _____

Annual spill response exercises as recommended by the national Preparedness Response Exercise Program (PREP) and Incident Command System training on an as needed basis.

See facility training logs and OPA 90 Exercise documentation.

1.6 Personnel, Training, and Discharge Prevention Procedures (cont'd)

Briefings

- The facility conducts prevention briefings for oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for the facility. These briefings include discussion of potential discharges or component failures and precautionary measures. The briefing program is further described as follows:

  SPCC training may be conducted at any of the monthly safety meetings, during the annual spill exercise, or information may be derived from posted materials.

Documentation

- Documentation of these Personnel, Training, and Discharge Prevention Briefing programs is maintained for a minimum period of three (3) years. Log forms are provided as follows:

  All training records are maintained in a database system, which may be accessed via the Regional office or through Corporate Headquarters in Houston.

- Discharge Prevention Briefing Logs are provided in ☒ Appendix B and ☒ Other (describe):

  Discharge Prevention Briefings are incorporated into the annual OPA 90 Exercise Documentation package. This documentation is found in the OPA 90 facility files.

- *Reference supporting documentation maintained separately, as appropriate:*

[*Additional pages may be attached as necessary.*]

1.7 Facility Layout and Diagram

1.7.1 Facility Layout

- The physical layout of the facility is described as follows:

See Appendix "C"

- Further details are provided in Section 2 - Container and Potential Spills Table.

1.7.2 A Facility diagram ☒ is attached (Appendix C) with the following detail and location information (as applicable):

- Containers and their contents.
- Transfer stations and connecting lines.
- Completely buried and bunkered tanks (including USTs covered under 40 CFR Part 280 or 281).
- Drum and portable container storage areas.
- Sumps.

1.8 Prevention, Response and Cleanup

Prevention

- The facility discharge prevention measures, including procedures for routine handling of products (loading, unloading, facility transfers, etc.), are described as follows:

  ☒ Facility Response Plan ☐ Other Document (Describe) and

  ☒ as described below:

Discharge Detection by Personnel

The detection of any discharge is most likely by visual observation since the facility is continually manned.

Automated Discharge Detection Systems

The bulk storage tanks are equipped with high-level alarms that would be activated if an uncontrolled overfill of product were to occur.

Facility Inspections

Observations of all storage and transfer areas are conducted seven days per week during a terminal security and integrity tour. The employee conducting the walk around observation looks for:

A. Evidence of leaks from tanks, trucks, piping, meters, valves, hoses and appurtenances.

B. Evidence that the integrity of the secondary containment has been breached.

C. Evidence of unauthorized entry and/or tampering with the facility.

Evidence of leaks or breaches in secondary containment shall be reported to the appropriate personnel identified in the FRP Emergency Phone List. If response actions are required, then the FRP should be followed.

Secondary Containment Inspections

Secondary containment observations are conducted visually on a daily basis during security tours. Secondary containment observations are conducted as per the Facility Response Plan.

Response Equipment Inspections

Onsite response equipment inspection is conducted on a regular basis, as per PREP Guidance.

1.8 Prevention (cont'd)

Control Room

The Facility has a control room.

Testing

External, Internal, Hydrostatic and Thickness Testing on Appurtenances

Knowledgeable employees and contractors conduct periodic inspections in accordance with Company policies and practices and recognized industry standards.

Calibration Program

A. Tank Gauging

Tank gauging is conducted on a regular basis to determine the level of product in the tank. This level is compared to sales, deliveries and receipts to verify product levels.

B. Prover Operations

A prover is a device used to identify variances in meter readings. The prover measures by volume the amounts of product passing through a meter, allowing the terminal staff to compare the results with the meter reading. This benefits the terminal by providing more accurate sales records. It also benefits the terminal by assisting in leak detection in lines or tanks. All meters used in the sale of product are proved on a regular basis.

Automated Discharge Detection

Alarm Systems

Refined and Fuel Oil Atmospheric Storage Tanks

All atmospheric storage tanks in refined (gasoline or distillate) service or fuel oil service are equipped with level safety-high (LSH) and level safety high-high (LSHH) safety switches with the exception of three small tanks. Personnel continually monitor these three small tanks during transfer operations.

If the level of product reaches the LSH or LSHH safety switches, a warning alarm is activated alerting the terminal operators of a potential tank overfill. Operators are required to take immediate responsive actions if a LSH or LSHH alarm is activated. This alarm is triggered approximately 20 minutes before maximum fill levels are reached at a maximum fill rate.

Lube Oil Atmospheric Storage Tanks

All lube base oil storage tanks receiving product from marine or rail are equipped with LSH (level safety-high) alarm systems indicating safe fill levels. This alarm is triggered approximately 20 minutes before maximum fill levels are reached at a maximum fill rate. Tanks are constantly monitored by personnel during the filling process.

1.8 Prevention (cont'd)

If the level of product exceeds LSH safety levels the activated alarm alerts terminal personnel of a potential tank overfill and immediate responsive actions are implemented.

After Hours Operation

The truck drivers are provided training that requires them to notify the Terminal Security Guard or Terminal Operator if they discover a leak or spill during after hours loading.

Self Inspection

See the FRP for additional detailed information regarding Self Inspection as well as various inspection forms.

Countermeasures

- The facility discharge discovery, response and cleanup capabilities are described in the:
  ☒ Facility Response Plan ☐ Other Document (Describe) and
  ☒ as described below:
  - Ensure the Safety of Citizens and Response Personnel
  - Control the Source of the Spill
  - Manage a Coordinated Response Effort
  - Maximize Protection of Environmentally Sensitive Areas
  - Contain and Recover Spilled Material
  - Recover and Rehabilitate Injured Wildlife
  - Remove Oil from Impacted Areas
  - Minimize Economic Impacts
  - Keep Stakeholders and Public Informed of Response Activities

- The resources available to the facility for discharge cleanup are provided in the
  ☐ Contact List (provided in Appendix A) or the ☒ Facility Response Plan

Disposal

- The facility has established the following methods of disposal for recovered materials in accordance with applicable legal requirements (check all that apply):

  ☒ Facility Response Plan ☐ Other Document (Describe) or ☐ Details below:

1.9 Impracticability (as applicable)

The containment and/or diversionary structures or equipment to prevent a discharge ☐ **are** ☒ **are not** practicable.

If not, the following provides a description of the impracticability:

1. Piping and Associated Appurtenances

The vast majority of the piping falls within secondary containment. For that limited amount of piping that falls outside of secondary containment, prevention and containment is provided by the measures outlined in the Deviations from the Rule section.

2. Lube Oil and Gasoline Additive Unloading Areas

These loading /unloading areas are not equipped with secondary containment. These areas are used on an infrequent basis and pose a minimum risk as a spill source.

- **If not** practicable, ☐ an oil spill contingency plan is attached (provided in Appendix D) or ☒ is addressed by the Facility Response Plan.
- A written commitment of manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged is provided in ☐ Appendix D or in the ☒ Facility Response Plan.
- If containment and/or diversionary structures are impracticable for bulk storage containers, then periodic integrity testing of the container(s) and integrity and leak testing of the valves and piping is required.

1.10 Deviations to Rule

☐ The facility has no deviations to the rule.

☒ The facility has identified various deviations from the rule and the equivalent environmental protection to support the deviations. The deviations, and the reasons for the deviations, are summarized ☒ below or ☐ in the appropriate sections of this plan.

1. Piping and associated appurtenances

The piping at terminals is designed, operated and maintained in accordance with ASME B31.4 industry code. Product temperatures are between atmospheric and 200 degrees F. Operating pressure cycles are below the design pressure of the pipe. Inspections for the terminal and station piping include:

1.10 Deviations to Rule (cont'd.)

Above ground piping is periodically inspected by knowledgeable personnel.

Below ground piping is inspected by knowledgeable personnel whenever it is uncovered. To minimize the likelihood of damage during excavations, procedures are in place to ensure that excavation and emergency plans are adequate prior to excavation.

Knowledgeable personnel internally inspect the piping whenever it is open for maintenance or modification.

Thermal pressure devices are used to protect piping and equipment from over pressure. The pressure devices are appropriately vented to prevent the release of hydrocarbon to the environment.

Maintenance includes performing a pop test at installation and during major repairs of the equipment or pipe being protected. Knowledgeable personnel periodically test these thermal relief devices.

Pressure relieving devices such as relief valves are used to prevent pressure buildup due to process excursions and surges in tanks, vessels, piping and pipelines. Relief valves and rupture disks are included in this category. Industry guidelines such as API 576 provide the basis for the company's maintenance program.

Pressure relief valves on piping and pipelines are pop tested and inspected by knowledgeable personnel periodically.

In addition to the inspections, relief, and control devices, the facility has an agency approved facility response plan. The plan provides for a facility response team, contracted oil spill response organizations, written internal and external notification procedures, response procedures and a documented training and exercise program.

2. Lube Oil and Gasoline Additive Unloading Areas

The Lube Oil Additive Unloading Area is paved and slopes to a storm water catch basin, which drains to the municipal storm drain system without passing through an oil/water separator. Consequently, the drain is covered during additive transfer such that potential spills will flow past the storm water catch basin and continue down gradient to the nearby process water catch basin.

The Gasoline Additive Unloading Station drains to both a nearby storm water catch basin connected to the oil/water separator in Tank Farm 1 and to a second catch basin which drains to the municipal storm drain system without passing through an oil/water separator. Consequently, the second catch basin is covered during additive transfers to contain spills in the facility storm water system.

Unloading at the designated unloading areas is performed on an infrequent basis. The truck drivers must be trained in this operation prior to performance. This operation is a supervised activity. In addition to the training and supervision, the facility has an agency approved facility response plan. The plan provides the following: a facility response team, contracted oil spill response organizations, written internal and external notification procedures, response procedures and a documented training and exercise program.

1.11 Conformance with other Requirements

Describe conformance with other applicable requirements and effective discharge prevention and containment procedures in-place at the facility. Include a description of compliance with more stringent State rules, regulations, and guidelines, if any:

1. This plan is in conformance with the requirements of the Oil Pollution Act (OPA). Established under the authority of section 311(j) (1) (c) of the Clean Water Act, the Federal Oil Pollution Prevention Program is designed to prevent the discharge of oil to navigable waters and to contain such discharges when they occur.

2. The requirements for an Emergency Contingency Plan under the U.S. Coast Guard Regulations 33 CFR 154.

3. The requirements of an emergency contingency plan under the Resource Conservation and Recovery Act (RCRA) 40 CFR Parts 265, Subparts C and D.

4. The emergency procedures required by the Department of Transportation (DOT) as identified in 49 CFR 192.615, 195.402 and similar regulations issued by the state agencies.

5. The Occupational Safety and Health Act requirements for an employee emergency plan and fire prevention plan as described in 29 CFR 1910.38 and the emergency planning and response requirements according to 29 CFR 1910.119(n) and 29 CFR 1910.120.

Section 2A
Onshore Facility Information

2A.1 Container and Potential Spills Table

- The potential spills sources at the facility are summarized in the following table:

[Insert Excel Document: 07-Cont and Pot Spills.xls]

Oil Source	Associated Substance (Contents) *(Oil)*	Source Capacity *(Bbls)*	Potential Failure	Rate of Flow *(Bbls/hr)*	Direction of Flow	Containment System(s)*
Aboveground Fixed Containers						
See attached						
Completely and Partially Buried Tanks						
See attached						
Mobile and Portable Containers						
See attached						
Operational Equipment (Transformers, Manufacturing Equipment, Process Vessels, etc.)						
See attached						
Truck or Rail Loading/Unloading Rack						
See attached						
Other Potential Spill Sources (Piping, Surface Impoundments, etc.)						
See attached						

- The material and construction of bulk storage containers ☒ **are** compatible with the material stored and conditions of storage such as pressure and temperature.
- All bulk storage container installations ☒ **are** ☐ **are not** constructed so that a means of secondary containment is provided for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. **If not**, describe the "impracticability" under Section 1.9.
- Diked areas ☒ **are** sufficiently impervious to contain discharged oil from reaching navigable waters in harmful quantities.
- Visible discharges, which result in a loss of product from containers will be promptly corrected and any accumulations of oil in the diked area(s) will be promptly removed.

* See Sec. 2A.3.1 for further details.

A.2 Bulk Storage Containers

2A.2.1 Completely and Partially Buried Tanks

- The facility ☒ **does** ☐ **does not** have completely buried metallic storage tanks that were installed on or after January 10, 1974.
  - **If yes**, corrosion protection is provided by ☒ protective coatings and ☒ cathodic protection (compatible with local soil conditions) or ☐ other: _____.
  - Completely buried tanks ☒ **are** regularly leak tested.
- The facility ☐ **does** ☒ **does not** have partially buried or bunkered metallic tanks.
  - **If yes**, corrosion protection is provided by ☐ protective coatings and/or ☐ cathodic protection (compatible with local soil conditions) or ☐ other: _____.

2A.2.2 Mobile or Portable Oil Storage Containers

- Mobile or portable oil storage containers ☒ **are** ☐ **are not** located at the facility (Note: 55-gallon drums and totes are examples of mobile or portable containers).

  The designated drum storage area is noted on the facility drawing in Appendix C.
  - **If yes**, secondary containment ☒ **is** ☐ **is not** provided which is adequately sized to contain the largest container plus sufficient freeboard for precipitation. See calculations in Appendix E.

2A.2.3 Internal Heating Coils

- The facility ☒ **does** ☐ **does not** utilize internal heating coils. **If so**, internal heating coil leakage is controlled by (check method that applies):

  ☐ Monitoring of steam return and exhaust lines for contamination, or passing the steam return or exhaust lines pass through a settling tank or other separation system.

  ☐ Steam return or exhaust lines do not discharge into an open water course.

  ☒ Equivalent environmental protection described as follows: _____

  The terminal uses steam to heat black oil tanks, some lube oil tanks and associated piping. Steam is also used to heat railcars in the Railcar Loading/Unloading Area. No hot oil coils are used. Much of the condensate generated through use of the steam is returned to the boiler. Boiler blow down water is diverted to a catch basin located beneath the boiler that leads to the process water system.

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 1						
Storage tank	36	Slop Oil	Rupture or overfill	21,933 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of Tank Farm 1 (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 4,150,608 gallons
Storage tank	1471	Hydraulic Tractor Fluid	Rupture or overfill	19,491 gallons		
Storage tank	2581	Marine Fuel Oil	Rupture or overfill	1,665,039 gallons		
Storage tank	2579	Hydraulic Tractor Fluid	Rupture or overfill	20,142 gallons		
Storage tank	2669	Marine Diesel	Rupture or overfill	477,164 gallons		
Storage tank	2713	Unax AW 46	Rupture or overfill	118,440 gallons		
Storage tank	2714	Guardol 15W/40	Rupture or overfill	118,440 gallons		
Storage tank	2783	Decant Oil	Rupture or overfil	685,230 gallons		
Storage tank	2784	Diesel #2	Rupture or overfill	1,459,514 gallons		
Storage tank	2917	RLOP 220 N	Rupture or overfill	649,728 gallons		
Storage tank	3623	HiTec 6576	Rupture or overfill	20,368 gallons		
Storage tank	3639	Super Syn BI 5W/30	Rupture or overfill	132,188 gallons		
Storage tank	4369	RLOP 220 N	Rupture or overfill	20,368 gallons		
Storage tank	4441	Octel 9056	Rupture or overfill	20,368 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 2						
Storage tank	2915	Unleaded Gasoline	Rupture or overfill	3,450,580 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of Tank Farm 2 (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 4,575,564 gallons
Storage tank	2916	Diesel#1/Diesel #2	Rupture or overfill	1,717,760 gallons		
Storage tank	2982	Diesel #1	Rupture or overfill	487,296 gallons		
Storage tank	2983	RLOP 220 N	Rupture or overfill	319,788 gallons		
Storage tank	3407	Unleaded Gasoline	Rupture or overfill	3,384,000 gallons		
Storage tank	3408	Unleaded Gasoline	Rupture or overfill	1,903,500 gallons		
Storage tank	3409	Unleaded Gasoline	Rupture or overfill	1,151,500 gallons		
Storage tank	3410	Ethanol	Rupture or overfill	302,269 gallons		
Storage tank	3411	Unleaded Gasoline	Rupture or overfill	302,269 gallons		
Storage tank	3412	~~Diesel #1~~ Ethanol	Rupture or overfill	302,269 gallons		
Storage tank	3413	Unleaded Gasoline	Rupture or overfill	302,269 gallons		
Storage tank	4223	Slop Oil	Rupture or overfill	20,368 gallons		
Storage tank	4259	Transmix	Rupture or overfill	230,300 gallons		
Storage tank	4327	Gasoline Slops	Rupture or overfill	10,187		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 3						
Storage tank	3414	RLOP 220 N	Rupture or overfill	222,360 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of Tank Farm 3 (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 4,296,390 gallons
Storage tank	3415	SUN 525	Rupture or overfill	222,075 gallons		
Storage tank	3416	RLOP 100 N	Rupture or overfill	222,075 gallons		
Storage tank	3417	Ultra S-4	Rupture or overfill	222,075 gallons		
Storage tank	3578	Industrial Fuel Oil	Rupture or overfill	3,384,000 gallons		
Storage tank	3739	SUN 150 B/S	Rupture or overfill	222,075 gallons		
Storage tank	3740	RLOP 600 N	Rupture or overfill	302,289 gallons		
Storage tank	3761	Diesel #2	Rupture or overfill	3,384,000 gallons		
Storage tank	4244	Mohawk 450	Rupture or overfill	20,368 gallons		
Storage tank	4245	SUN 525	Rupture or overfill	20,368 gallons		
Storage tank	4252	Residual Fuel Oil	Rupture or overfill	470,000 gallons		
Storage tank	4253	Residual Fuel Oil	Rupture or overfill	470,000 gallons		
Storage tank	4254	PS 300	Rupture or overfill	470,000 gallons		
Storage tank	4255	Bio Diesel	Rupture or overfill	470,000 gallons		
Storage tank	4256	Out of Service	Rupture or overfill	230,300 gallons		
Storage tank	4257	Out of Service	Rupture or overfill	58,750 gallons		
Storage tank	4258	Line Clippings	Rupture or overfill	20,368 gallons		
Storage tank	4265	Flush	Rupture or overfill	20,368 gallons		
Storage tank	4302	RLOP 600 N	Rupture or overfill	20,368 gallons		
Storage tank	4303	RLOP 100 N	Rupture or overfill	20,368 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 3 (cont'd.)						
Storage tank	4305	Out of Service	Rupture or overfill	10,187 gallons		
Storage tank	4306	RLOP 100 N	Rupture or overfill	223,175 gallons		
Storage tank	4318	Diesel #2	Rupture or overfill	1,626,200 gallons		
Storage tank	4320	Sup Syn BL 10W/30	Rupture or overfill	42,575 gallons		
Storage tank	4321	Uniguide II 100	Rupture or overfill	42,575 gallons		
Storage tank	4322	TSX HD 15W/40	Rupture or overfill	42,575 gallons		
Storage tank	4323	Super ATF	Rupture or overfill	42,575 gallons		
Storage tank	F103	UTRA 58	Rupture or overfill	29,375 gallons		
Storage tank	F104	UTRA 58	Rupture or overfill	21,728 gallons		
F Tank Farm						
Storage tank	4335	Utility	Rupture or overfill	20,368 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of F Tank Farm (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 16,338 gallons; The F Tank Farm is equipped with an open catch basin connected the process water system, which significantly increases the effective containment capacity of the F Tank Farm.
Storage tank	4336	Utility	Rupture or overfill	20,368 gallons		
Storage tank	4337	Utility	Rupture or overfill	20,368 gallons		
Storage tank	4436	Unax AW 32	Rupture or overfill	19,920 gallons		
Storage tank	4437	Unax WR 32	Rupture or overfill	19,930 gallons		
Storage tank	F10	Utility	Rupture or overfill	6,380 gallons		
Storage tank	F11	Utility	Rupture or overfill	6,380 gallons		
Storage tank	F12	Utility	Rupture or overfill	6,380 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Upper Lube Cell						
Storage tank	3741	Rimar CLF 17E	Rupture or overfill	20,368 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of the Upper Lube Cell (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 42,378 gallons; Additionally, the Upper Lube Cell is equipped with an open catch basin connected the process water system, which significantly increases the effective containment capacity of the Upper Lube Cell.
Storage tank	3742	MP 80/90	Rupture or overfill	20,368 gallons		
Storage tank	3743	Utility	Rupture or overfill	20,368 gallons		
Storage tank	3744	HYNAP N 100	Rupture or overfill	20,368 gallons		
Storage tank	3745	HITEC 5751	Rupture or overfill	20,368 gallons		
Storage tank	3746	Lubrizol 4998C	Rupture or overfill	20,368 gallons		
Storage tank	3747	Lubrizol 4990CH	Rupture or overfill	20,368 gallons		
Storage tank	3757	HITEC 1193	Rupture or overfill	20,368 gallons		
Storage tank	3760	Raffene 750L	Rupture or overfill	20,368 gallons		
Storage tank	4191	Lubrizol 48254	Rupture or overfill	20,368 gallons		
Storage tank	4192	Lubrizol 7075F	Rupture or overfill	20,368 gallons		
Storage tank	4241	Unax AW 68	Rupture or overfill	20,368 gallons		
Storage tank	4242	Unax AW 68	Rupture or overfill	20,368 gallons		
Storage tank	4243	HT4/10W	Rupture or overfill	20,368 gallons		
Storage tank	4281	Versa Tran ATF	Rupture or overfill	20,368 gallons		
Storage tank	4332	Super ATF	Rupture or overfill	29,368 gallons		
Storage tank	4333	Paint Premier 10W/30	Rupture or overfill	20,368 gallons		
Storage tank	4334	Super 5W/20	Rupture or overfill	20,368 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Lower Lube Cell						
Storage tank	4300	Ramar CLF 17E	Rupture or overfill	29,375 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of the Lower Lube Cell (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 47,334 gallons; Additionally, the Lower Lube Cell is equipped with an open catch basin connected the process water system, which significantly increases the effective containment capacity of the Lower Lube Cell.
Storage tank	4331	Ethyl HiTec 6888 E	Rupture or overfill	29,375 gallons		
Storage tank	4386	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4389	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4390	Bar & Chain 150	Rupture or overfill	12,154 gallons		
Storage tank	4391	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4392	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4393	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4394	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4395	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4397	Lubrizol 9692A	Rupture or overfill	12,154 gallons		
Storage tank	4398	HITEC 1193A	Rupture or overfill	12,154 gallons		
Storage tank	4399	Firebird 15W/40	Rupture or overfill	12,154 gallons		
Storage tank	4400	Guardol 30	Rupture or overfill	12,154 gallons		
Storage tank	4401	Mohaw 150	Rupture or overfill	12,154 gallons		
Storage tank	4402	TSX HD 10	Rupture or overfill	12,154 gallons		
Storage tank	4403	HT4/30W	Rupture or overfill	12,154 gallons		
Storage tank	4404	Fleet Sup EC 15W/40	Rupture or overfill	12,154 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Lower Lube Cell (cont'd.)						
Storage tank	4405	HITEC 3472	Rupture or overfill	12,154 gallons		
Storage tank	4406	Lubrizol 9890A	Rupture or overfill	12,154 gallons		
Storage tank	4407	HITEC 388	Rupture or overfill	12,154 gallons		
Storage tank	4408	HITEC 5756	Rupture or overfill	12,154 gallons		
Lube Blending Warehouse						
Storage tank	4338	Conoco AN 801	Rupture or overfill	1,008 gallons	See attached drainage plan	The warehouse is equipped with two means of secondary containment. The Blending and Container Filling Areas are equipped with concrete floors sloped to catch basins that drain to two 5,000-gallon underground spill containment tanks located at the south end of the warehouse. The Package Storage Area is equipped with a concrete floor and curbing along the north side and northeast corner of the warehouse to prevent potential spills from packages products along that side, or additive tanks in the northeast corner, from migrating from the building.
Storage tank	4339	Ethyl HITEC 534	Rupture or overfill	1,008 gallons		
Storage tank	4340	Ethyl HITEC 385	Rupture or overfill	1,008 gallons		
Storage tank	4341	Utility	Rupture or overfill	1,008 gallons		
Storage tank	4342	HITEC 008	Rupture or overfill	1,008 gallons		
Storage tank	4343	*Viscoplex* 1-302	Rupture or overfill	1,008 gallons		
Storage tank	4344	Oleic Acid / Emersol 213	Rupture or overfill	1,008 gallons		
Storage tank	4345	Lubrizol 8790	Rupture or overfill	1,008 gallons		
Storage tank	4346	Utility	Rupture or overfill	1,008 gallons		
Storage tank	4347	Utility	Rupture or overfill	1,008 gallons		
Storage tank	F-8	Utility	Rupture or overfill			
Storage tank	F-9	Line Clippings	Rupture or overfill			
Storage tank	F-13	Slops - Under Lab	Rupture or overfill			
Storage tank	F-14	Flush - Under Lab	Rupture or overfill			

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Truck and Railcar Loading/Unloading Areas						
Refined Products Truck Loading Rack	NA	Gasoline, diesel, kerosene, ethanol and transmix	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The Refined Products Loading Rack utilizes vapor recovery and overfill protection/brake interlock systems. Trucks are equipped with high-level sensors. The drivers are responsible for presetting loading volumes and are in attendance at all times. The rack is surrounded by a sloped concrete slab. Runoff from the slab is into strip drains that lead to a 10,000 gallon spill containment tank. The secondary containment at the rack and containment tank is sufficient to contain the maximum anticipated spill.
			Compartment rupture	4,000 gallons (maximum)		
			Valve failure	100-200 gpm		
Gasoline Additive Truck Unloading Area	NA	Gasoline additives	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	The area is graded such that spills will flow towards the Refined Products Loading Rack containment area. Spills in this area could also flow to a storm water catch basin that drains to a storm water separator in Tank Farm 1. Therefore, terminal procedures require operators to seal off the catch basin with a magnetic cover during additive transfers such that the spills will pond in the area to facilitate recovery.
			Valve failure	100-200 gpm		
Refined Products Truck Unloading Area	NA	Gasoline and ethanol	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	A spill will flow to catch basins located in the center of the concrete containment pad and then into the process water system. The secondary containment can contain a spill of the maximum size anticipated. During the transfer of ethanol, the catch basin lift pump is shutdown to prevent an ethanol spill from entering the process system and dissolving into water.
			Valve failure	100-200 gpm		
Diesel/Black Oil Pump Off Area	NA	Diesel and black oils	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	A spill will be contained by perimeter curbing and catch basins that drain to the process water system.
			Valve failure	100-200 gpm		
Lube Oil Truck Loading Rack	NA	Lube oils	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The Lube Oil Truck Loading Rack area is paved and equipped with asphalt and concrete berms. Several catch basins drain the area to the process water system. The rack is equipped with a deadman switch that requires constant pressure from the operator to continue loading operations. Therefore, an operator has to be present at all times during loading of lube oils. The area is designed to contain the largest foreseeable spill of 5,000 gallons which is the largest compartment of a typical tank truck or trailer.
			Compartment rupture	5,000 gallons (maximum)		
			Valve failure	100-200 gpm		
Black Oil/RFO Truck Loading Rack	NA	Black oils and re-refined oils	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The Black Oil/RFO Truck Loading Rack area is paved and equipped with asphalt and concrete berms. Several catch basins drain the area to the process water system. The rack is equipped with a deadman switch that requires constant pressure from the operator to continue loading operations. Therefore, an operator has to be present at all times during loading. The area is designed to contain the largest foreseeable spill of 4,000 gallons which is the largest compartment of a typical tank truck or trailer.
			Compartment rupture	4,000 gallons (maximum)		
			Valve failure	100-200 gpm		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Truck and Railcar Loading/Unloading Areas (cont'd.)						
Lube Oil/RFO Truck Unloading Area	NA	Lube oils and re-refined oils	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	A spill will be contained by perimeter curbing and catch basins that drain to the process water system.
			Valve failure	100-200 gpm		
Lube Additive Truck Unloading Area	NA	Lube oil additives	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The area is paved but not equipped with a dedicated containment system. As a result, operators place a cover over the nearby storm water catch basin during additive transfers. This prevents spills from entering the storm water system and causes the spill to continue down gradient into the a process water system catch basin.
			Compartment rupture	5,000 gallons (maximum)		
			Valve failure	100-200 gpm		
Railcar Loading/Unloading Area	NA	Lube base stocks, additives, finished lube oils; black oil	Railcar overfill	400 gpm (maximum)	See attached drainage plans	The Rail Car Loading/Unloading area is surrounded by a sloped gravel area and asphalt containment berm along the northwest perimeter of the area. Smaller sloped concrete slabs are located under each of the four transfer stations for the rack, and are equipped with catch basins that drain to the process water system. The combination of the concrete slabs, catch basins, and asphalt berms provide containment area for at least 30,000 gallons. Railcars are also loaded and unloaded under the supervision of terminal personnel. Operators are required to check the railcars and transfer equipment every 20 minutes and be present during the loading of the last 2,000 gallons. Operators are required to be present if offloading hazardous materials.
			Railcar rupture	30,000 gallons (maximum)		
			Valve failure	100 - 400 gpm		
Marine Dock						
Marine Transfers	NA	Gasoline, diesel, kerosene, black oil, and lube oil	Cargo hose failure	140,880 gallons (assumes 5 minute detection and shutdown, four hoses in use, simultaneous rupture, complete drainage following shutdown)	See attached drainage plans	The marine dock manifold/riser area is surrounded by sloped concrete and bermed around the perimeter. The containment area drains to a 2,000 gallon spill containment tank beneath the dock, which is equipped with level-control activated pumps that pump any spilled product to the process water system. Transfer operations at the marine dock are conducted under the continual supervision of terminal and vessel personnel and in accordance with U.S. Coast Guard regulations. In the unlikely event of a spill at the marine dock or tug refueling area, terminal personnel will deploy a floating spill containment boom to encircle and contain the spill if it is safe to do so. Permanent floating boom is positioned around the dock to contain spilled product under the dock. Containment of gasoline spills is rarely, if ever, recommended due to the associated fire and explosion hazard.
				5,600 gpm (offloading); 2,100 gpm (loading)		
Tug Fueling			Hose failure	18,000 gpm (maximum)	See attached drainage plans	The tug refueling area at the dock is equipped with a similar containment system, which also drains to the holding tank.

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell HL)	Direction of Flow	Containment Systems
Transfer Pipelines						
Pipeline leak or rupture	NA	Gasoline, diesel, kerosene, black oil, and lube oil	Pipeline leak	4,500 gpm (maximum, assuming 12-inch pipe)	See attached drainage plans	Most product piping is aboveground, except between tank farms or where pipelines cross under streets. Pipelines are not equipped with secondary containment except where located inside tank farm dikes. Aboveground piping is protected from corrosion by periodic painting, and underground piping is protected from corrosion by a coating or wrapping. Aboveground pipelines are protected from vehicular damage by being located out of the driving pattern, on overhead racks or protected guardrails. Pipe supports are designed to minimize abrasion and corrosion and to allow for expansion and contraction. Pipelines rest on supports fabricated from steel pipe. Pipe end connections are capped or blind-flanged and maked if the line is not in service or is idle for extended periods. Piping is visually inspected on a periodic basis. Pipelines and hoses under U.S. Coast Guard jurisdiction are pressure tested annually, and all pipelines are tested after repairs that may affect structural integrity.
			Pipeline rupture	27,900 gallons (assuming 5 minute detection and shutdown, largest transfer pipeline operating at maximum rate, and complete drainage following shutdown)		
Lube Oil Warehouse						
Blending and Container Filling Areas	NA	Lube oils, lube oil additives, base stocks	Equipment failure; Feedstock tank rupture	1,000 gallons (size of largest feedstock tank)	See attached drainage plans	The Blending and Container Filling Areas are equipped with concrete floors sloped to catch basins that drain to two 5,000-gallon underground spill containment tanks located at the south end of the warehouse.
Package Storage Area	NA	Lube oils, lube oil additives, base stocks	Drum or tote failure; Additive tank rupture	1,060 gallons (size of largest lube oil additive tank)	See attached drainage plans	The Package Storage Area is equipped with a concrete floor and curbing along the north side and northeast corner of the warehouse to prevent potential spills from packages products along that side, or additive tanks in the northeast corner, from migrating from the building.
Solubilizer tank	NA	Lube oil additives	Rupture or overfill	8,733 gallons (size of tank)	See attached drainage plans	The area under the solubilizer is equipped with concrete floors sloped to catch basins that drain to two 5,000-gallon underground spill containment tanks located at the south end of the warehouse.
Waste Storage Area						
Waste Storage Area	NA	Hazardous and non-hazardous wastes	Drum failure or puncture	55 gallons	See attached drainage plans	The waste storage area consists of a sloped concrete pad surrounded by a 6-inch berm with a centralized catch basin. The catch basin drains to the process water system.
Hot Boxes						
Hot Boxes	NA	Lube oil and lube oil additives	Drum failure or puncture	55 gallons	See attached drainage plans	The sheet-metal hot boxes are on top of a concrete pad surrounded by a 9-inch concrete berm. The maximum spill would be contained by the bermed concrete pad.
Drum Storage Area						
Drum Storage	NA	Lube oil and lube oil additives	Drum failure or puncture	55 gallons	See attached drainage plans	The drum storage area is paved and sloped to catch basins that lead to the process water system

2A.2.4 Fail Safe Precautions

- Container installation(s) are engineered with at least one of the following devices (check all that apply):

☒ High liquid level alarm with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice. Describe the operation, method and frequency of testing and or inspection of these devices and where records are maintained.

The high level alarms are tested regularly in accordance with API RP 2350. The facility maintains these records on site for a minimum of three years.

☐ High liquid level pump cutoff devices set to stop flow at a predetermined container content level.

☐ Direct audible or code signal communication between the container gauger and the pumping station.

☐ Fast response system for determining the liquid level of each bulk storage container (i.e. digital computer, telepulse, direct vision gauge). Note: If this alternative is used, a person must be present to monitor gauges and the bulk container.

2A.3 Facility Containment, Drainage and Water Treatment

2A.3.1 Secondary Containment Systems

Containment ID	Drainage Method	Type of Containment and Material of Construction
See attached		

- Drainage from diked storage area(s) is restrained by manually operated valves, manually and/or automatically operated pumps and other: oil/water separators.
  (Note: Flapper-type valves may not be used.)

- Reference supporting documentation maintained separately, as appropriate:

  Refer to Appendix E, calculations.

2A.3.2 Facility Drainage to Surface Waters without Facility Treatment System

- Manually operated valves ☒ **are** ☐ **are not** ☐ **N/A, no valves** normally kept closed and ☐ **are** ☒ **are not** resealed following drainage.
- Manually activated pumps ☐ **are** ☐ **are not** ☒ **N/A, no pumps** normally kept off and ☐ **are** ☐ **are not** placed in operation following drainage. (This is a gravity feed.)

- Describe valve operation or equivalent environmental protection: Except during periods of heavy rainfall, discharge valves at the storm water separators are generally kept closed and operated manually to batch discharge accumulated storm water. The water is visually inspected and tested prior to discharge. All other tank farm drain lines are controlled by manually operated valves, which are kept closed and locked. Surface runoff from the non-storage/transfer portions of the terminal generally flows to catch basins connected directly to the municipal storm water system or will sheet flow off site and not pass through an oil/water separator.

2A.3.3 Water Treatment System

- Drainage waters ☒ **are** ☐ **are not** treated in more than one (1) treatment unit.
  - **If yes**, and treatment is continuous, two lift stations ☒ **are** ☐ **are not** provided with at least one permanently installed.

Except during periods of heavy rainfall, discharge valves at the separators are generally kept closed and opened manually as required to batch discharge accumulated storm water. Prior to discharge, the accumulated storm water is inspected for the presence of oil or other contamination. If oil/contamination is noted, it is removed. Storm water is tested per NPDES permit requirements to ensure the water meets the permitted limits before discharge to the municipal storm sewer system. Additional information regarding the water treatment system is contained in the terminal's Storm Water Pollution Control plan and Accidental Spill plan.

2A.3.4 Effluent Treatment Facilities

The facility ☒ **does** ☐ **does not** treat water prior to discharge off site. **If yes**, the measures in-place to ensure that system upsets are detected are described as follows:

Process water (i.e., water from areas in contact with petroleum hydrocarbons) is treated using an oil/water separator and dissolved-air floatation-type hydrocleaner. Post indicator type valves can be closed to prevent spills or out-of-compliance process water from reaching the municipal sewer system. Process water is tested per waste water discharge permit requirements to ensure the water meets the permitted limits before discharge to the municipal sanitary sewer system.

2A.3.4 Effluent Treatment Facilities (cont'd.)

Additional information regarding the water treatment system is contained in the terminal's Storm Water Pollution Control plan and Accidental Spill plan.

2A.3.5 Facility Undiked Drainage to Surface Waters

- The facility ☒ **does** ☐ **does not** have the potential to discharge into undiked areas.
  - **If yes**, The facility undiked areas ☒ **do** ☐ **do not** flow to ☐ ponds ☐ lagoons ☒ catchment basins ☒ other: Oil / water separators
  - **If not**, describe equivalent environmental protection:

Undiked drainage is diverted to a series of catch basins that flow to either storm water oil/water separators or a process water oil/water separator. In areas with potential for drainage directly to the municipal storm sewer (e.g., the Gasoline and Lube Additive Truck Unloading Areas), nearby storm water catch basins are sealed during transfer operations. Some areas of the facility where transfer/storage operations are not conducted, such as vehicle drives, parking areas and storage areas (see attached drainage figures), drain directly to the municipal storm water system or surface flows off site. These areas are visually inspected. Additionally, all of the terminal's storm, process, and sanitary sewer systems are color coded. The color coding enables personnel to quickly identify the ultimate destination of liquids entering drains and take appropriate action to close valves to isolate the affected portion of the system.

2A.4 Facility Transfer Operations, Pumping and Facility Process

2A.4.1 Facility Piping

- The facility ☒ **does** ☐ **does not** have buried piping. Corrosion protection for all new and replaced buried piping is provided as follows (check all that apply):
  - ☒ Wrapping and Coating
  - ☐ **If wrapping/coating is not provided,** describe equivalent environmental protection:
  - ☒ Cathodic Protection or satisfy the corrosion protection standards in 40 CFR Part 280 or 281
  - ☐ **If cathodic protection is not provided,** describe equivalent environmental protection:
- When a pipe section is exposed, it is examined and corrective action taken as necessary.
- Describe the facility piping systems (aboveground and buried):

The facility has buried piping with cathodic protection that has been installed and is maintained in accordance with generally accepted industry standards.

2A.4.2 Out of Service Piping

Out of service piping terminal connections ☒ **are** ☐ **are not** capped or blank-flanged and marked when the piping is not in service or in standby service for extended periods.

2A.4.3 Pipe Supports

Pipe supports ☒ **are** ☐ **are not** designed to minimize abrasion and corrosion and allow for expansion and contraction.

2A.4.4 Vehicle Warnings

- Vehicles ☒ **are** ☐ **are not** warned ☒ orally, by ☒ signs, with ☒ bumper guards, or ☒ other methods to be sure that no vehicle will endanger aboveground piping or other oil transfer operations. Describe vehicle warning systems/procedures or describe equivalent environmental protection.

  Signs are posted, employees and contractors are advised of where they can or cannot drive.

  Gates, chains and other barriers are used to control access to restricted areas.

2A.5. Facility Rail Car & Tank Truck Loading/Unloading Rack

- Tank truck loading/unloading ☒ **does** ☐ **does not** occur at the facility.
- Tank car (rail) loading/unloading ☒ **does** ☐ **does not** occur at the facility.

If yes to either, proceed with the following sections.

2A.5.1 Rail Car & Tank Truck Containment Systems for Loading/Unloading Rack

- Loading/unloading area drainage ☒ **does** ☐ **does not** flow into a catchment basin, treatment facility, or a quick drainage system designed to handle discharges.
- The containment system ☒ **does** ☐ **does not** hold the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility. Describe containment system design, construction materials, and volume (if the containment system does not hold the maximum capacity, then document the impracticability in Section 1.9):

  The Rail Car Loading/Unloading Area is surrounded by a sloped gravel area and asphalt containment berm along the northwest perimeter of the area. Smaller sloped concrete slabs are located under each of the four transfer stations for the rack, and are equipped with catch basins that drain to the process water system. The combination of the concrete slabs, catch basins, and asphalt berms provide containment for the largest railcar loaded/unloaded at the terminal (i.e., 30,000 gallons). The truck rack containment areas are bermed and/or sloped to either strip drains

2A.5.1 Rail Car & Tank Truck Containment Systems for Loading/Unloading Rack (cont'd)

that lead to a spill containment tank and then to the process water system, or directly to catch basins that are connected to the process water system. The containment systems for the truck racks are sufficient to contain ruptures from the largest truck/trailer compartments loaded at the terminal (i.e., 5,000 gallons).

Refer to the Container and Potential Spills Table in Section 2A.1 for additional details.

2A.5.2 Prevention of Premature Vehicular Departure

- The methods, procedures, and/or equipment used to prevent premature vehicular departure include (Check all that apply):

☐ ***Interlocked warning lights,***	☐ ***Physical barrier systems,***
☒ ***Warning signs,***	☐ ***Wheel chocks,***
☒ ***Vehicle brake interlock systems,***	☐ ***Company personnel supervising***
☒ ***Driver training***	***loading/unloading operation***

Describe these and other premature vehicular departure prevention measures (for each area):

All drivers are required to attend training prior to loading at the facility. The training includes prevention of premature vehicle departure. The Refined Products Loading Rack utilizes a vapor recovery and overfill protection/brake interlock system. Trucks are equipped with high-level sensors. The drivers are responsible for presetting loading volumes and are in attendance at all times. The loading computer system will not allow an untrained driver to load. The Lube Oil and Black Oil/RFO Loading Racks are equipped with a deadman switch that requires constant pressure from the operator to continue loading operations. At all loading racks, drivers are required to be in attendance at all times during loading operations.

2A.5.3 Drain And Outlet Inspection

- Drains and outlets on tank trucks and tank cars ☒ **are** ☐ **are not** checked for leakage before loading/unloading or departure and, if necessary, are tightened, adjusted or replaced. The driver conducts a visual inspection prior to departure. **If not**, describe equivalent environmental protection: _____

[*Additional pages may be attached as necessary for multiple truck or rail loading/unloading rack operations.*]

2A.6 Security (cont'd.)

- The facility ☒ **is** ☐ **is not** fully fenced. Describe the fence or, **if not** fenced, describe equivalent environmental protection: _____

  8' fence with barb and/or razor wire or 12' concrete walls.

- Entrance gates ☒ **are** ☐ **are not** (☐ **N/A**) locked and/or guarded when the facility is unattended or not in production. Describe the gate security or, **if not** locked or guarded, describe equivalent environmental protection: _____

  The gate security is a gate with either a lock or a pass code required for entry.

- Any valves which permit direct outward flow of a container's contents ☐ **have** ☒ **do not have** (☐ **N/A**) adequate security measures so that they remain closed when in non-operating or standby status. Describe valve security or **if not** secure, describe equivalent environmental protection: _____

  All valves are located in secured areas. Valves are observed for leaks, drips or other potential problems. Valves are also observed on a random basis by facility personnel during the normal course of business.

- Starter controls on all product pumps in non-operating or standby status ☐ **are** ☒ **are not** (☐ **N/A**) locked in the off position and located at sites accessible only to authorized personnel. Describe pump starter control security or **if not** locked, describe equivalent environmental protection: _____

  Both manual and automated pumps are in operation at the facility. The access to these pumps is limited to facility personnel or facility agents.

- When facility piping is not in service or in standby service for an extended time, the loading/unloading connections ☒ **are** ☐ **are not** (☐ **N/A**) securely capped or blank flanged. This applies to piping that is emptied of its liquid content either by draining or by inert gas pressure. **If not** secure, describe equivalent environmental protection: _____

  When piping is permanently taken out of service, the pipe is drained. The pipe will be blank flanged. The pipe then may be left empty, filled with water, filled with inert gas or otherwise plugged or otherwise sealed.

- Facility lighting ☒ **is** ☐ **is not** (☐ **N/A**) commensurate with the operation and the type and location of the facility to assist in the discovery of discharges and to prevent discharges occurring through acts of vandalism. Describe facility lighting or, **if** lighting is **not** commensurate, describe equivalent environmental protection: _____

A.6 Security (cont'd.)

Lighting at the facility is adequate to discover any leaks that might occur. The facility maintains full time security and security cameras at various locations which are monitored by terminal personnel.

2A.7 Inspections, Tests and Records

Container Testing and Inspections

- Describe the facility aboveground bulk storage container integrity testing and inspection program. Include inspection frequency, records of inspections and any equivalent environmental protection:

  The Company has a detailed risk-based above-ground container inspection program that conforms with applicable rules and regulations. Containers subject to the API 650 program are tested and maintained according to API 653. Other containers are observed on a regular basis at no greater than one year intervals. If the container is simply being changed from one type of product to another and no problems have been detected and further inspection may not be performed, the Terminal Supervisor will make the decision as to the appropriateness of additional inspections.

- In the event that a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service, the container ☒ **will** be evaluated for the risk of discharge or failure due to brittle fracture or other catastrophe.

- Describe the facility leak testing program for completely buried tanks. Include frequency, records of inspections and any equivalent environmental protection:

  Annual leak detection testing is performed on UST's by third party contractor.

  UST's are equipped with auto gauges and audible overfill protection alarms.

- Describe the frequency and method to test liquid level sensing devices: ☒ High liquid level alarm ☐ High liquid level pump cutoff device ☐ Direct audible or code signal communication ☐ Fast response system ☐ Other:

  High liquid level alarms are tested every month prior to each tank receipt.

2A.7 Inspections, Tests and Records (Cont'd)

Buried Piping Integrity and Leak Testing

- Buried piping ☒ **is** ☐ **is not** present.
- Integrity and leak testing of buried piping is performed at the time of ☒ installation, ☒ modification, ☒ construction, ☒relocation, or ☒ replacement.

Aboveground Piping Examination

- All aboveground valves and piping (including flange joints, valve glands and bodies, catch pans, pipe supports, locking of valves, and metal surfaces) are regularly examined.

  Describe the facility piping inspection program (and integrity and leak testing, as appropriate). Include inspection frequency, records of inspection and any equivalent environmental protection:

  See Deviation Discussion on Piping Inspections.
  Terminal operators perform at least two visual inspections of the tank farms per day and a monthly inspection of the entire terminal including tanks, containment systems, pipelines and process and storm water collection systems. Any problems or potential problems are noted and rectified as soon as practical. Pipelines and hoses under U.S. Coast Guard jurisdiction are pressure tested annually, and all pipelines are tested after repairs that may affect structural integrity. All underground piping will be integrity and leak tested at the time of installation, modification, construction, relocation, or replacement. Records of inspection and repair are maintained at the facility.

Dike Integrity and Drainage Inspections

- Describe the dike integrity inspection program:
  All surface water contained within the tank dikes is inspected for visible traces of hydrocarbons before the drain valves are opened. If visible traces of hydrocarbons are not observed, the manual valves are opened to allow water to discharge. After draining, the manual valves are closed.

- Describe inspections for oil discharges within diked areas:
  See above

2A.7 Inspections, Tests and Records (Cont'd)

- Describe the procedure for supervising the drainage of rainwater from secondary containment into a storm drain or an open watercourse. Include description of (a) inspection for pollutants and (b) method of valving security:
  Batch sample every month. If in compliance with the permit, examine the water for contaminants. If good, then batch release. All valves are in a secure restricted area.

Other Applicable Inspections

- Describe other applicable facility inspections, including effluent discharge inspections and inspections of effluent bypassing systems, if applicable:

Documentation:

- Sample inspection and test records are provided in Appendix B. These and/or substantially equivalent forms are used by terminal personnel to document inspections.

- *Reference supporting documentation maintained separately, as appropriate:*
  Refer to facility files.

  Records of the inspections and tests (including those maintained under usual and customary business practices), signed by the appropriate supervisor or inspector are retained on file for a minimum period of three (3) years.

Appendix A
Notification

- Sample Contact List and Phone Numbers
- Sample Notification Data Sheet
- Sample Submittal of Information to Regional Administrator for Qualified Discharge(s)

Sample - Contact List and Phone Numbers

The following is a contact list and phone number reference for the Facility:

Contact	Primary	Alternate
Designated Person Accountable For Oil Spill Prevention and/or Facility Response Coordinator ***Name/Title:*** ***Tom Lyons*** ***Name/Title:*** ***Facility Supervisor***	Tom Lyons Facility Supervisor 503-248-1572 503-849-9604	Steve Kober NW Area Supervisor 503-248-1538 206-730-5430
National Response Center	(800) 424-8802	(202) 267-2675
State Agency for Oil Spill Response		
Cleanup Contractors (as necessary):		
See FRP		
Other Federal, State and local agencies (as necessary):		
See FRP		
Other contact references:		
See FRP		

[Additional pages may be attached as necessary.]

Sample - Notification Data Sheet

The Facility will utilize this form or a substantially similar form to relate information in the event of a discharge:

Date: _____ *Time:* _____

INCIDENT DESCRIPTION

Reporter's Full Name: _____ *Position:* _____
Day Phone Number: _____ *Evening Phone Number:* _____
Company: _____ *Organization Type:* _____
Facility Address: _____ *Owner's Address:* _____
_____ _____
_____ _____
_____
Facility Latitude: _____ *Facility Longitude:* _____
Spill Location: _____
(if not at Facility) _____
Responsible Party's Name: _____ *Phone Number:* _____
Responsible Party's Address: _____
Source and/or cause of discharge: _____
_____
_____
Nearest City: _____
County: _____ *State:* _____ *Zip code:* _____
Section: _____ *Township:* _____ *Range:* _____ *County:* _____
Distance from City: _____ *Direction from City:* _____
Container Type: _____ *Container Storage Capacity:* _____
Facility Oil Storage Capacity: _____
Material:

Total Quantity Released	Water Impact (*YES or NO*)	Quantity into Water

RESPONSE ACTION(S)

Action(s) taken to Correct, Control, or Mitigate Incident: _____
_____
_____
Number of Injuries: _____ *Number of Deaths:* _____
Evacuation(s): _____ *Number Evacuated:* _____
Damage Estimate: _____
More information about impacted medium: _____
_____

CALLER NOTIFICATIONS

National Response Center (NRC): 1-800-424-8802
Additional Notifications (Circle all applicable): *State* *Other*

ADDITIONAL INFORMATION

Any information about the incident not recorded elsewhere in this report: _____
_____
_____

NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.

Sample - Submittal of Information to Regional Administrator for Qualified Discharge(s)

In the event of a qualified discharge or discharges, this page can be utilized to provide official notification to the Regional Administrator. If the Facility has had a discharge or discharges which meet one of the following two criteria, then this report must be submitted to the Regional Administrator within 60 days. (Check as appropriate)

☐ This Facility has experienced a reportable spill as referenced in 40 CFR Part 112.1(b) of 1,000 gallons or more.

☐ This Facility has experienced two (2) reportable spills (as referenced in 40 CFR Part 112.1(b) of greater than 42 gallons each within a 12-month period.

Facility Name and Location: _____

Facility Contact Person (Name, address/phone number): _____

Facility maximum storage or handling capacity: _____

Facility normal daily throughput: _____

Describe the corrective action and countermeasures taken (include description of equipment repairs and replacements): _____

Describe the Facility (maps, flow diagrams and topographical maps attached as necessary): _____

Describe the cause of discharge (as referenced in 40 CFR Part 112.1(b)) including failure analysis of the system is: _____

Describe the preventative measures taken or contemplated to be taken to minimize the possibility of recurrence: _____

Other pertinent information: _____

- A copy of this report is also to be sent to the appropriate state agency in charge of oil pollution control activities.

Appendix B
Logs

PPENDIX B – LOGS

Inspection Log Checklist
This or a substantially similar form will be used.

Frequency of Inspection: _____

Date of Inspection: _____ Inspector: _____

Onshore Facility – Component	Adequate (Y/N)		Comments
Visible discharges, which result in a loss of product from containers, will be promptly corrected and any accumulations of oil in the diked area(s) will be promptly removed.			
Container Surface (Walls, Roof)	☐ Yes	☐ No	
Container (Foundation/Supports/Cradles)	☐ Yes	☐ No	
Aboveground Piping:			
Metal Surfaces	☐ Yes	☐ No	
Flange Joints	☐ Yes	☐ No	
Valve Glands and Bodies	☐ Yes	☐ No	
Catch Pans	☐ Yes	☐ No	
Pipeline Supports	☐ Yes	☐ No	
Secondary Containment (Walls, Floor)	☐ Yes	☐ No	
Bulk Storage Container Integrity Test	☐ Yes	☐ No	
Buried Piping – Integrity & Leak Testing	☐ Yes	☐ No	

APPENDIX B – LOGS

Personnel Training/Discharge Prevention Briefing Log
This or a substantially similar form will be used.

Topic(s): _____
(Note: Required topics must include SPCC Plan)

Sign In Sheet

Name	Company /Position	Telephone
1.		
2		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		

Instructor:_____ Date: _____

Subject/Issue Identified	**Required Action**
	Implementation Date:_____

APPENDIX B – LOGS

Container/Containment Inspection Log / Drainage Event Log

This or a substantially similar form will be used.

Inspector: _____ Date: _____

Inspection Frequency: _____ (Retain record three (3) years.)

Container/ Containment	Comments	Drainage Event (Vol.)

Check containers for:

- Leaks, drip marks and discoloration
- Puddles containing spilled or leaked material
- Corrosion
- Cracks
- Localized dead vegetation

Check foundation for:

- Cracks
- Discoloration
- Puddles containing spilled or leaked material
- Settling
- Gaps between tank and foundation
- Damage caused by vegetation roots

Check piping for:

- Droplets of stored material
- Discoloration
- Corrosion
- Bowing of pipe between supports
- Evidence of stored material seepage from valves or seals
- Localized dead vegetation

Check containment for:

- Cracks
- Discoloration
- Presence of spilled material
- Corrosion (if applicable)
- Erosion (if applicable)
- Valve conditions (if applicable)

Record drainage event

- Appearance of storm water discharged
- Volume of water and volume of oil, if any, removed discharged
- Other details (i.e. testing)

APPENDIX B – LOGS

This or a substantially similar form will be used.

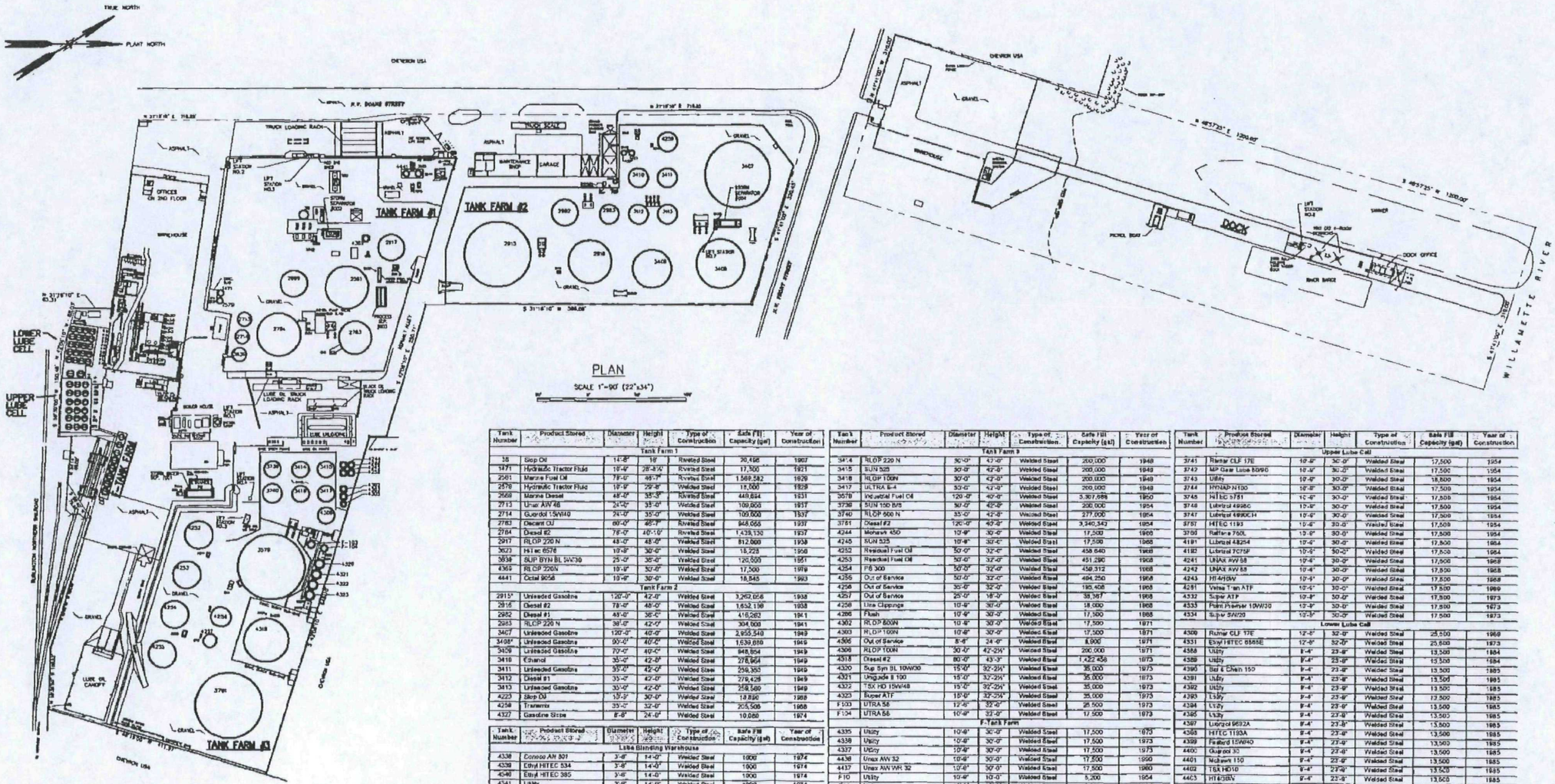
Pollution Prevention Equipment and Systems Log

Pollution Prevention Equipment:

Inspection/ Test Date	Condition	Action Taken	Supervisor or Inspector's Signature

Appendix C
Facility Diagram

Appendix C
Facility Diagram



PLAN
SCALE 1"=90' (22"x34")

Tank Number	Product Stored	Diameter	Height	Type of Construction	Safe Fill Capacity (gal)	Year of Construction
Tank Farm 1						
16	Slop Oil	14'-8"	18'	Riveted Steel	20,466	1907
1471	Hydraulic Tractor Fluid	19'-4"	28'-8½"	Riveted Steel	17,300	1921
2581	Marine Fuel Oil	78'-0"	46'-7"	Riveted Steel	1,569,582	1929
2578	Hydraulic Tractor Fluid	19'-9"	29'-8"	Welded Steel	18,000	1929
2569	Marine Diesel	48'-0"	35'-9"	Riveted Steel	449,894	1931
2713	Unal AW 46	24'-0"	35'-0"	Welded Steel	109,900	1937
2714	Guardol 15W40	24'-0"	35'-0"	Welded Steel	109,900	1937
2783	Decant Oil	60'-0"	48'-7"	Riveted Steel	848,055	1937
2784	Diesel #2	78'-0"	40'-10"	Riveted Steel	1,439,130	1937
2917	RLOP 220 N	48'-0"	48'-0"	Welded Steel	812,000	1938
3023	Heiec 6578	19'-8"	30'-0"	Welded Steel	18,225	1956
3038	SUP 150 BH BL 5W30	25'-0"	32'-0"	Welded Steel	120,000	1957
4365	RLOP 720N	19'-4"	32'-0"	Welded Steel	17,500	1979
4441	Octal 9058	19'-4"	30'-0"	Welded Steel	18,845	1993
Tank Farm 2						
2915*	Unleaded Gasoline	120'-0"	42'-0"	Welded Steel	3,262,056	1938
2916	Diesel #2	78'-0"	48'-0"	Welded Steel	1,652,196	1938
2982	Diesel #1	48'-0"	36'-0"	Welded Steel	416,282	1941
2983	RLOP 220 N	36'-0"	42'-0"	Welded Steel	304,500	1941
3407	Unleaded Gasoline	120'-0"	40'-0"	Welded Steel	2,955,540	1949
3408*	Unleaded Gasoline	90'-0"	40'-0"	Welded Steel	1,639,080	1949
3409	Unleaded Gasoline	70'-0"	40'-0"	Welded Steel	848,854	1949
3410	Ethanol	35'-0"	42'-0"	Welded Steel	278,964	1949
3411	Unleaded Gasoline	35'-0"	42'-0"	Welded Steel	259,355	1949
3412	Diesel #1	35'-0"	42'-0"	Welded Steel	279,429	1949
3413	Unleaded Gasoline	35'-0"	42'-0"	Welded Steel	259,580	1949
4223	Slop Oil	19'-5"	30'-0"	Welded Steel	18,890	1988
4258	Transmix	35'-0"	32'-0"	Welded Steel	205,506	1988
4327	Gasoline Slops	8'-8"	24'-0"	Welded Steel	10,000	1974
Lube Blending Warehouse						
4338	Conoco AN 801	3'-6"	14'-0"	Welded Steel	1000	1974
4339	Ethyl HITEC 534	3'-6"	14'-0"	Welded Steel	1000	1974
4340	Ethyl HITEC 385	3'-6"	14'-0"	Welded Steel	1000	1974
4341	Utility	3'-6"	14'-0"	Welded Steel	1000	1974
4342	HITEC 008	3'-6"	14'-0"	Welded Steel	1000	1974
4343	Viscoplex 1-302	3'-6"	14'-0"	Welded Steel	1000	1974
4344	Oleic Acid/Emersol 213	3'-6"	14'-0"	Welded Steel	1000	1974
4345	Lubrizol 8790	3'-6"	14'-0"	Welded Steel	1000	1974
4346	Utility	3'-6"	14'-0"	Welded Steel	1000	1974
4347	Utility	3'-6"	14'-0"	Welded Steel	1000	1974
F-14	Flush - Under Lab	5'-3"	30'-0"	Welded Steel	5000	1981
F-8	Utility			Welded Steel	1000	1985
F-9	Line Clippings			Welded Steel	2200	1954
F-13	Flange - Under Lab	5'-3"	30'-0"	Welded Steel	5000	1981

Tank Number	Product Stored	Diameter	Height	Type of Construction	Safe Fill Capacity (gal)	Year of Construction
Tank Farm 3						
3414	RLOP 220 N	90'-0"	42'-0"	Welded Steel	200,000	1948
3415	SUN 525	90'-0"	42'-0"	Welded Steel	200,000	1948
3418	RLOP 100N	90'-0"	42'-0"	Welded Steel	200,000	1948
3417	ULTRA E-4	93'-0"	42'-0"	Welded Steel	200,000	1948
3579	Industrial Fuel Oil	120'-0"	40'-0"	Welded Steel	3,307,688	1950
3736	SUN 150 B/S	90'-0"	42'-0"	Welded Steel	200,000	1954
3740	RLOP 600 N	35'-0"	42'-0"	Welded Steel	277,000	1954
3761	Diesel #2	120'-0"	40'-0"	Welded Steel	3,340,542	1954
4244	Mohawk 450	19'-9"	30'-0"	Welded Steel	17,500	1966
4245	SUN 525	19'-8"	30'-0"	Welded Steel	17,500	1968
4252	Residual Fuel Oil	50'-0"	32'-0"	Welded Steel	458,640	1968
4253	Residual Fuel Oil	50'-0"	32'-0"	Welded Steel	451,280	1968
4254	F6 300	50'-0"	32'-0"	Welded Steel	458,312	1968
4255	Out of Service	50'-0"	32'-0"	Welded Steel	494,250	1968
4256	Out of Service	35'-0"	32'-0"	Welded Steel	195,408	1968
4257	Out of Service	25'-0"	18'-0"	Welded Steel	38,567	1968
4258	Line Clippings	19'-8"	30'-0"	Welded Steel	18,000	1968
4286	Flush	19'-8"	30'-0"	Welded Steel	17,500	1968
4302	RLOP 600N	19'-8"	30'-0"	Welded Steel	17,500	1971
4303	RLOP 100N	19'-8"	30'-0"	Welded Steel	17,500	1971
4305	Out of Service	8'-8"	24'-0"	Welded Steel	8,000	1971
4306	RLOP 100N	30'-0"	42'-2½"	Welded Steel	200,000	1971
4318	Diesel #2	80'-0"	43'-3"	Welded Steel	1,422,456	1973
4320	Sup Syn 5L 10W30	15'-0"	32'-2½"	Welded Steel	35,000	1973
4321	Unigrade II 100	15'-0"	32'-2½"	Welded Steel	35,000	1973
4322	TSX HD 15W40	15'-0"	32'-2½"	Welded Steel	35,000	1973
4323	Super ATF	15'-0"	32'-2½"	Welded Steel	35,000	1973
F103	UTRA 56	12'-6"	32'-0"	Welded Steel	25,500	1973
F104	UTRA 56	10'-8"	32'-0"	Welded Steel	17,500	1973
F-Tank Farm						
4335	Utility	10'-8"	30'-0"	Welded Steel	17,500	1973
4336	Utility	10'-8"	30'-0"	Welded Steel	17,500	1973
4337	Utility	10'-8"	30'-0"	Welded Steel	17,500	1973
4438	Unax AW 32	10'-8"	30'-0"	Welded Steel	17,500	1990
4437	Unax AW WR 32	10'-8"	30'-0"	Welded Steel	17,500	1980
F10	Utility	10'-8"	10'-0"	Welded Steel	5,200	1954
F11	Utility	10'-8"	10'-0"	Welded Steel	5,200	1954
F12	Utility	10'-8"	10'-0"	Welded Steel	5,200	1964

Tank Number	Product Stored	Diameter	Height	Type of Construction	Safe Fill Capacity (gal)	Year of Construction
Upper Lube Cell						
3741	Rimtec CLF 17E	19'-8"	30'-0"	Welded Steel	17,500	1954
3742	MP Gear Lube 80W90	19'-8"	30'-0"	Welded Steel	17,500	1954
3743	Utility	19'-8"	30'-0"	Welded Steel	18,500	1954
3744	HYDAP N100	19'-8"	30'-0"	Welded Steel	17,500	1954
3745	HITEC 5751	19'-8"	30'-0"	Welded Steel	17,500	1954
3746	Lubrizol 4998C	19'-8"	30'-0"	Welded Steel	17,500	1954
3747	Lubrizol 4990CH	19'-8"	30'-0"	Welded Steel	17,500	1954
3757	HITEC 1193	19'-8"	30'-0"	Welded Steel	17,500	1954
3760	Refine 760L	19'-8"	30'-0"	Welded Steel	17,500	1954
4191	Lubrizol 4825A	19'-8"	30'-0"	Welded Steel	17,500	1964
4192	Lubrizol 7075F	19'-8"	30'-0"	Welded Steel	17,500	1964
4241	UNAX AW 68	19'-8"	30'-0"	Welded Steel	17,500	1968
4242	UNAX AW 68	19'-8"	30'-0"	Welded Steel	17,500	1968
4243	HI 46HV	19'-8"	30'-0"	Welded Steel	17,500	1968
4281	Vistac Tran ATF	19'-8"	30'-0"	Welded Steel	17,500	1969
4332	Super ATF	19'-8"	30'-0"	Welded Steel	17,500	1973
4533	Paint Premixer 10W30	19'-8"	30'-0"	Welded Steel	17,500	1973
4534	Super SW/20	19'-8"	30'-0"	Welded Steel	17,500	1973
Lower Lube Cell						
4309	Rimtec CLF 17E	12'-6"	32'-0"	Welded Steel	25,500	1969
4331	Ethyl HITEC 8585E	12'-6"	32'-0"	Welded Steel	25,500	1973
4388	Utility	8'-4"	23'-8"	Welded Steel	13,500	1984
4389	Utility	8'-4"	23'-8"	Welded Steel	13,500	1984
4390	Bar & Chain 150	8'-4"	23'-8"	Welded Steel	13,500	1985
4391	Utility	8'-4"	23'-8"	Welded Steel	13,500	1985
4392	Utility	8'-4"	23'-8"	Welded Steel	13,500	1985
4393	Utility	8'-4"	23'-8"	Welded Steel	13,500	1985
4394	Utility	8'-4"	23'-8"	Welded Steel	13,500	1985
4395	Utility	8'-4"	23'-8"	Welded Steel	13,500	1985
4397	Liverpool 9632A	8'-4"	23'-8"	Welded Steel	13,500	1985
4398	HITEC 1193A	8'-4"	23'-8"	Welded Steel	13,500	1985
4399	Fleetrol 15W40	8'-4"	23'-8"	Welded Steel	13,500	1985
4400	Guardol 30	8'-4"	23'-8"	Welded Steel	13,500	1985
4401	Mohawk 150	8'-4"	23'-8"	Welded Steel	13,500	1985
4402	TSX HD10	8'-4"	23'-8"	Welded Steel	13,500	1985
4403	HI 46HV	8'-4"	23'-8"	Welded Steel	13,500	1985
4404	Fleet Sup EC 15W40	8'-4"	23'-8"	Welded Steel	13,500	1985
4405	HITEC 3472	8'-4"	23'-8"	Welded Steel	13,500	1987
4406	Lubrizol 5596A	8'-4"	23'-8"	Welded Steel	13,500	1987
4407	Ethyl HITEC 388	8'-4"	23'-8"	Welded Steel	13,500	1987
4408	Ethyl HITEC 5758	8'-4"	23'-8"	Welded Steel	13,500	1987

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29th AVE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

AEC PROJECT NUMBER: 25-31

DRAWING NO.	REFERENCE DRAWING

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	UPDATED FOR SWPCP	DAB	SM	WHB	02/12/98
B	REVISE BARRELS ON TANK DATA AND LOGO	CKB	WHB	WHB	03/10/03
C	ADD LUBE OIL CANOPY AND WASTE STORAGE	CKB	WHB	WHB	11/22/04
D	GENERAL REVISION	CEW	WHB	WHB	12/05/08

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

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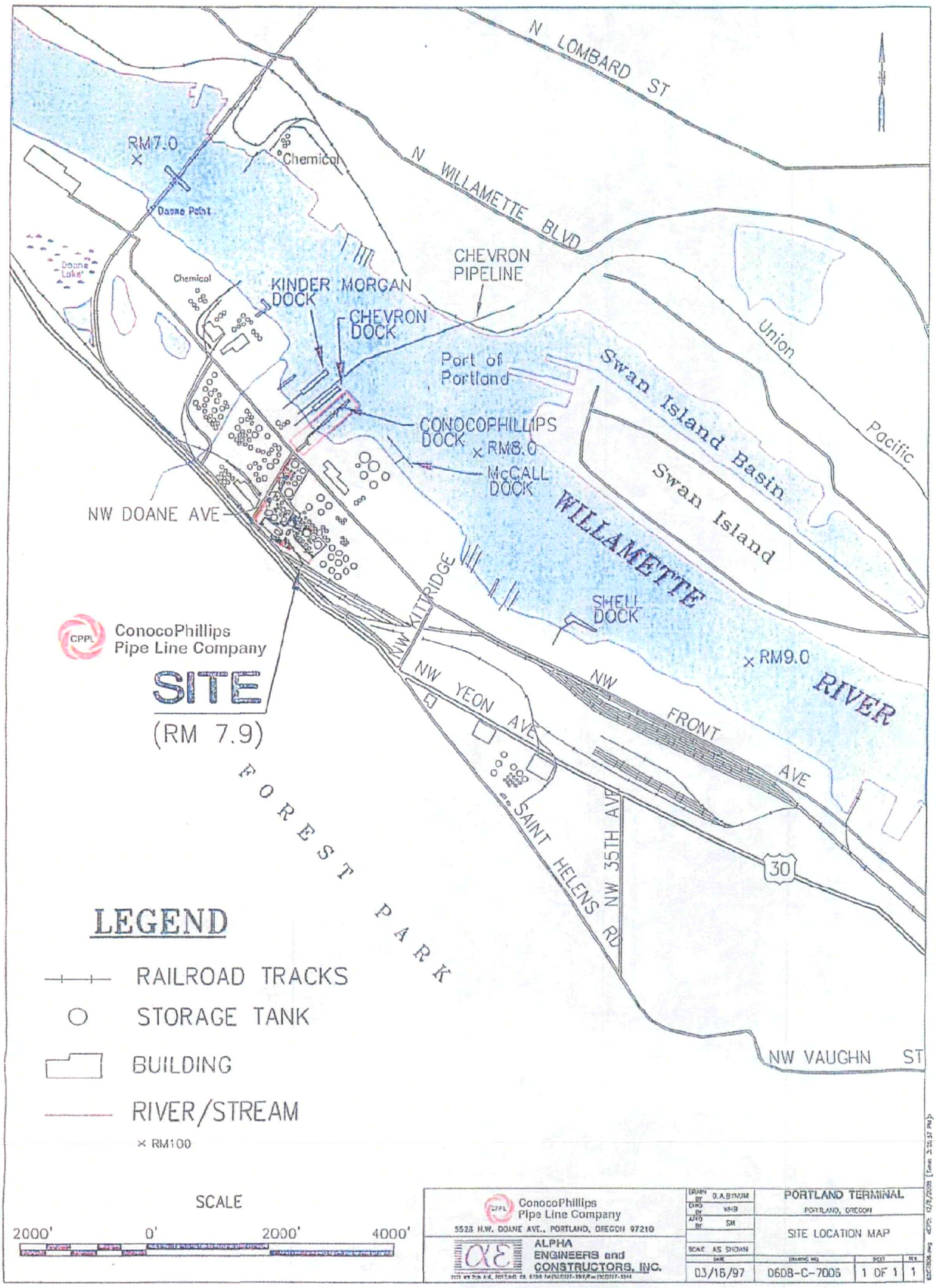
ConocoPhillips Pipe Line Company
5528 N.W. DOANE AVE
PORTLAND OREGON

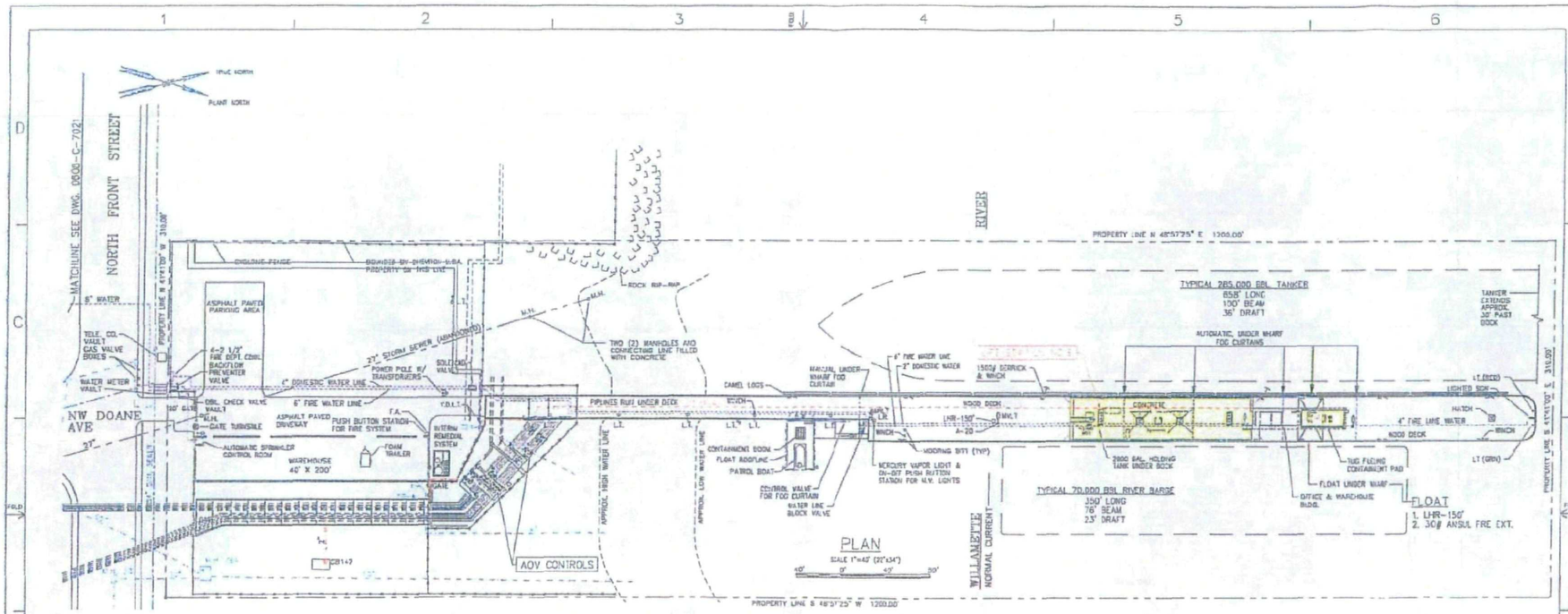
DR. D.A.BYNUM	CONTRACTOR No.
DSGN. D.A.BYNUM	PROJECT NO. 25-31
CK. MK AP. KJP	DWG. SCALE AS SHOWN
DATE 02/12/98	PLOT SCALE

PORTLAND TERMINAL

TITLE: SITE PLAN

DWG. No. 0608-C-1000 | SHEET 1 OF 1 | REV. No. D


N LOMBARD ST
N WILLAMETTE BLVD
RM7.0
Chemical
Doane Point
Doane Lake
Chemical
KINDER MORGAN DOCK
CHEVRON DOCK
CHEVRON PIPELINE
Port of Portland
CONOCOPHILLIPS DOCK
RM8.0
McCALL DOCK
Union
Pacific
Swan Island Basin
Swan Island
WILLAMETTE RIVER
NW DOANE AVE
NW KITTRIDGE
SHELL DOCK
RM9.0
ConocoPhillips Pipe Line Company
SITE
(RM 7.9)
NW YEON AVE
NW FRONT AVE
SAINT HELENS RD
NW 35TH AVE
30
FOREST PARK
NW VAUGHN ST
LEGEND
RAILROAD TRACKS
STORAGE TANK
BUILDING
RIVER/STREAM
× RM100
SCALE
2000' 0' 2000' 4000'
ConocoPhillips Pipe Line Company
5528 N.W. DOANE AVE., PORTLAND, OREGON 97210
ALPHA ENGINEERS and CONSTRUCTORS, INC.
DRAWN BY D.A.BYNUM
CHKD BY VHB
APVD BY SM
SCALE AS SHOWN
DATE 03/16/97
PORTLAND TERMINAL
PORTLAND, OREGON
SITE LOCATION MAP
DRAWING NO. 0608-C-7005
SHEET 1 OF 1
REV 1

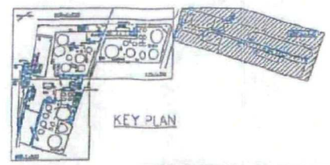


LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- SANITARY SEWER
- CITY WATER
- NATURAL GAS

UNTREATED DRAINAGE

PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003



KEY PLAN

DRAWING NO.	REFERENCE DRAWING
0608-C-7020	TANK FARM NO.1 GENERAL ARRANGEMENT

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENTS	DAB	MK	WHB	03/05/97
B	GENERAL UPDATE	DAB	MK	WHB	03/26/97
C	REVISE DRAIN DRAINAGE LEGEND	DAB	MK	WHB	07/24/97
D	UPDATED FOR SWPCP	DAB	SW	WHB	01/12/98
E	ADDED AOV CONTROLS.	DAB	WHB	WHB	03/14/03
F	REMOVED BARGE LOADING NOTE				
F	UPDATED VALVE BLOCK	CDW	WHB	WHB	12/08/05

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

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ConocoPhillips Pipe Line Company
5228 SW DOANE, AVE.
PORTLAND OR 97210

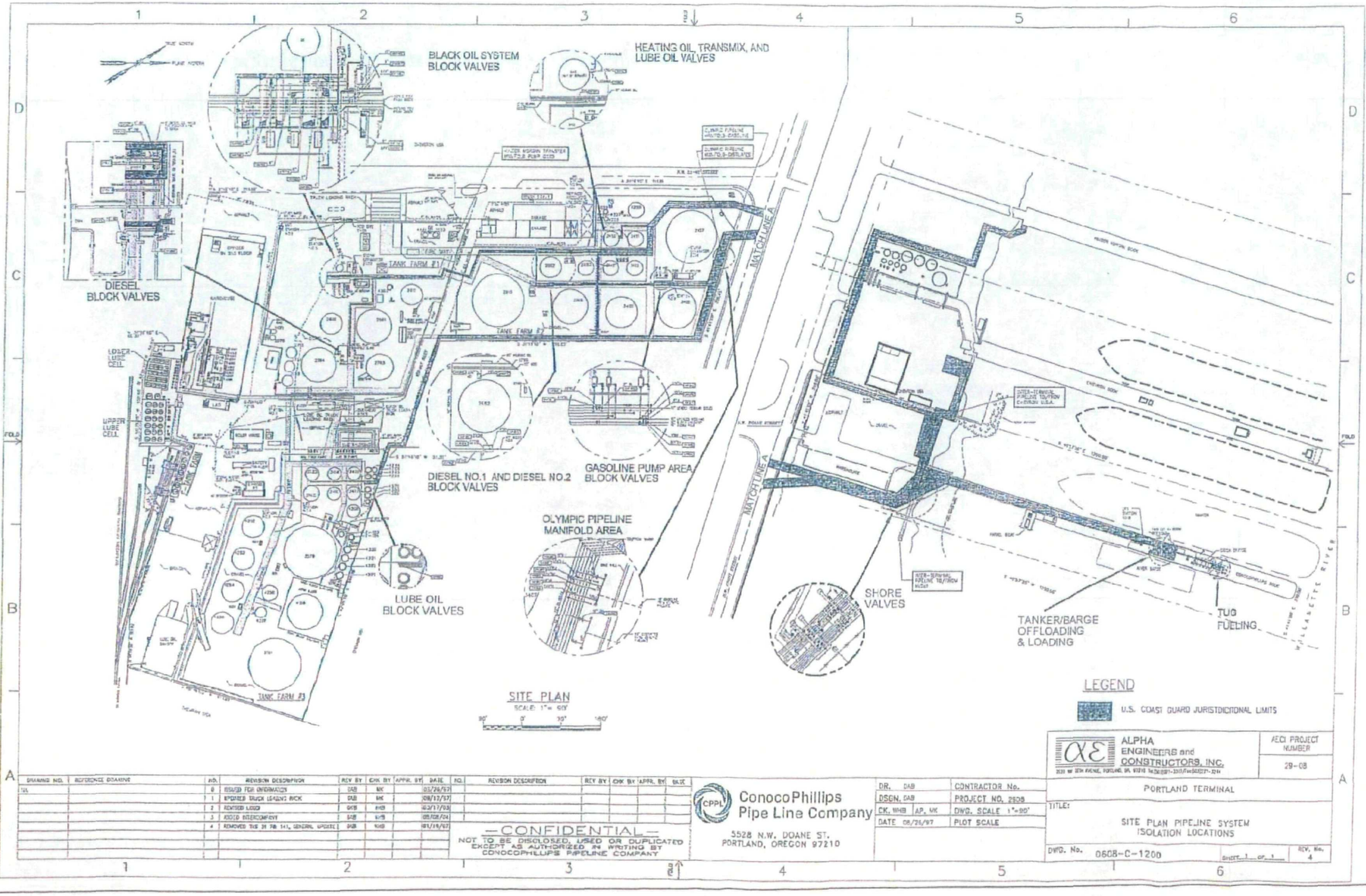
DR. DABYNUM		CONTRACTOR No.	
DSGN. DABYNUM		PROJECT NO. 25-31	
CK. MK	AP. KJP	DWG. SCALE AS SHOWN	
DATE 03/18/97		PLOT SCALE	

ALPHA ENGINEERS and CONSTRUCTORS, INC.
ACE PROJECT NUMBER 25-31

PORTLAND TERMINAL

TITLE: DOCK FACILITIES
SITE DRAINAGE PLAN

DWG. No. 0608-C-7020 | SHEET 1 OF 1 | REV. No. F



DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
'AS		0	ISSUED FOR INFORMATION	DAB	MK		03/26/97
		1	UPDATED TRUCK LOADING RACK	DAB	MK		08/12/97
		2	REVISED LEGEND	DAB	MKB		02/17/98
		3	ADDED INTERCOMPANY	DAB	MKB		05/08/04
		4	REMOVED TKS 31 & 141, GENERAL UPDATE	DAB	MKB		01/15/07

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

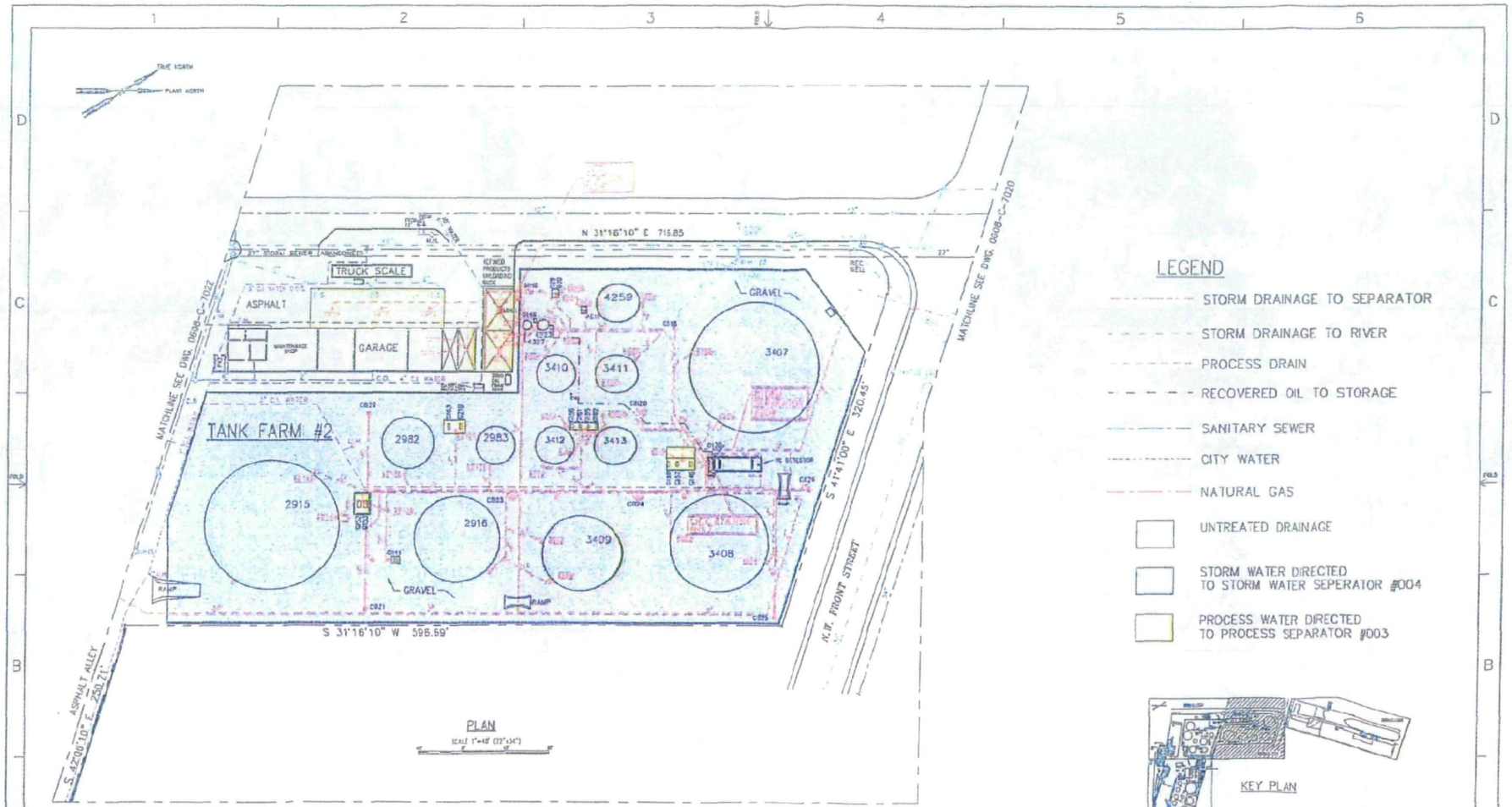
DR. DAB		CONTRACTOR No.	
DSGN. DAB		PROJECT NO. 2908	
CK. MKB	AP. MK	DWG. SCALE 1"=80'	
DATE 08/26/97		PLOT SCALE	

ALPHA ENGINEERS and CONSTRUCTORS, INC.
AEI PROJECT NUMBER: 29-08

PORTLAND TERMINAL

TITLE: SITE PLAN PIPELINE SYSTEM ISOLATION LOCATIONS

DWG. No. 0608-C-1200 SHEET 1 OF 1 REV. No. 4



PLAN
SCALE 1"=40' (22"x34")

DRAWING NO.	REFERENCE DRAWING
0608-C-7035	ECN EXCLUDES GENERAL ARRANGEMENT
0608-C-7021	THIS DWG NO.1 GENERAL ARRANGEMENT

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENT	DJB	MK	KNB	03/26/97
B	GENERAL UPDATE	DJB	MK	KNB	03/26/97
C	REVISE STORM DRAINAGE LEGEND	DJB	MK	KNB	03/24/97
D	UPDATED FOR SHOP'97	DJB	SM	KNB	05/12/98
E	UPDATE FOR CHANGES ON 0608-C-7000	DJB	SM	KNB	05/15/98
F	REMOVE FIGURE NO. 400 REVISED 0000	DJB	DJB	KNB	03/14/03
G	UPDATED TITLEBLOCK	CEW	KLB	KNB	12/08/04

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

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GPPL ConocoPhillips Pipe Line Company
5228 SW DOANE, AVE.
PORTLAND OR 97210

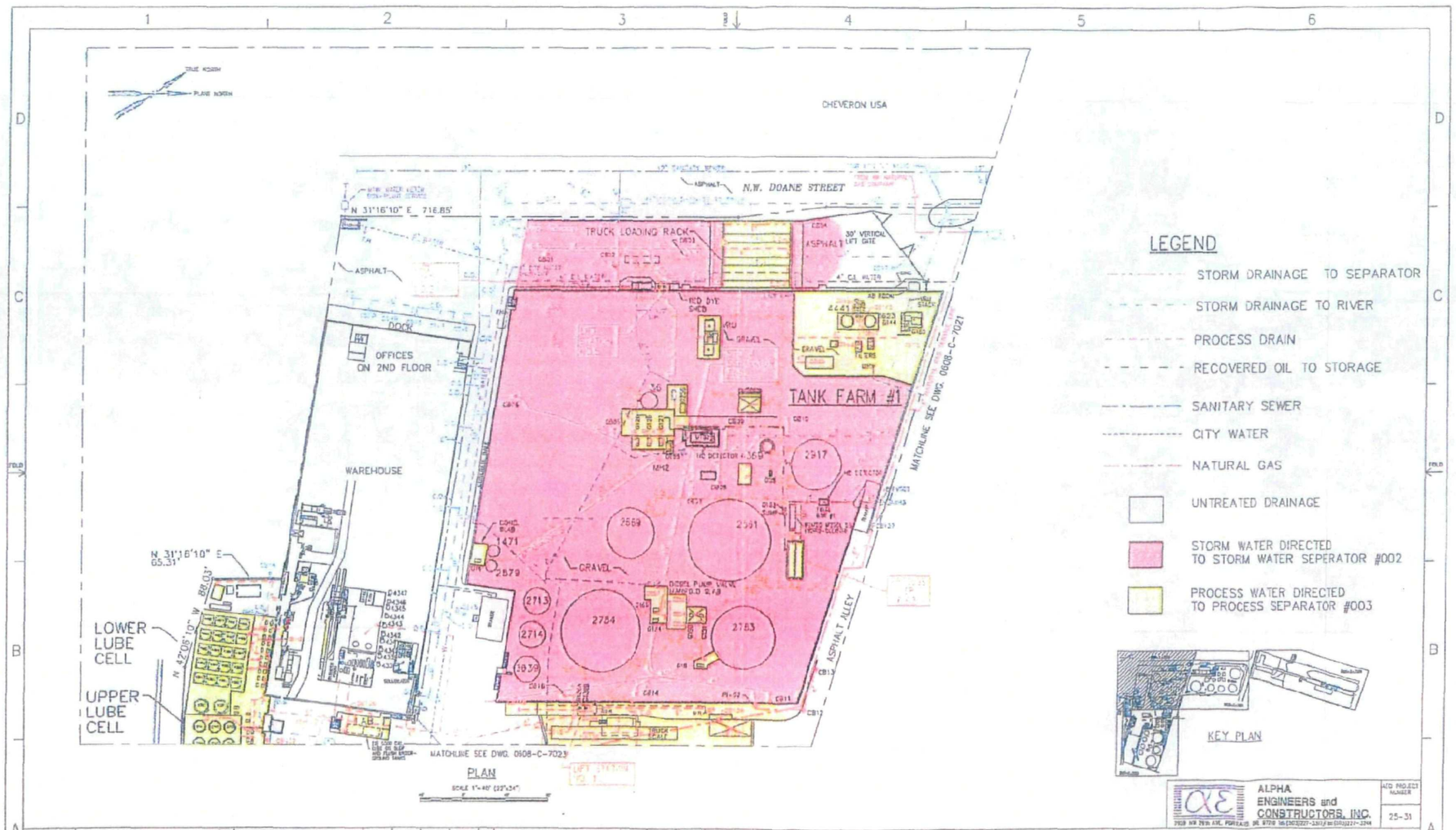
DR. DAJBYNUM		CONTRACTOR No.	
DSGN. DAJBYNUM		PROJECT NO. 25-31	
CK. MK	AP. KJP	DWG. SCALE AS SHOWN	
DATE 03/18/97		PLOT SCALE	

ALPHA ENGINEERS and CONSTRUCTORS INC.
ACD FILE(S) SCALE(S) 25-31

PORTLAND TERMINAL

TITLE: TANK FARM 2
SITE DRAINAGE PLAN

DWG. No. 0608-C-7021 | SHEET 1 OF 1 | REV. No. G



DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR BY	DATE
0608-C-7021	TANK FARM NO.1 GENERAL ARRANGEMENT	A	FOR REVIEW AND COMMENT	DJB	JK	WHB	03/28/97
0608-C-7023	TANK FARM NO.3 GENERAL ARRANGEMENT	B	GENERAL UPDATE	DJB	JK	WHB	03/28/97
		C	REVISE STORM DRAINAGE LEGEND	DJB	JK	WHB	07/14/97
		D	UPDATED FOR SWPCP	DJB	JM	WHB	02/12/98
		E	UPDATE TO REFLECT CHANGES ON DWG. 0608-C-7020	DJB	TM	WHB	05/15/98
		F	REMOVE FIGURE NO. AND REVISE LOCD	DJB	WHB	WHB	03/01/03
		G	UPDATE SIDEWALKS	CTM	WHB	WHB	12/05/06

ConocoPhillips Pipe Line Company
5228 SW DOANE, AVE.
PORTLAND OR 97210

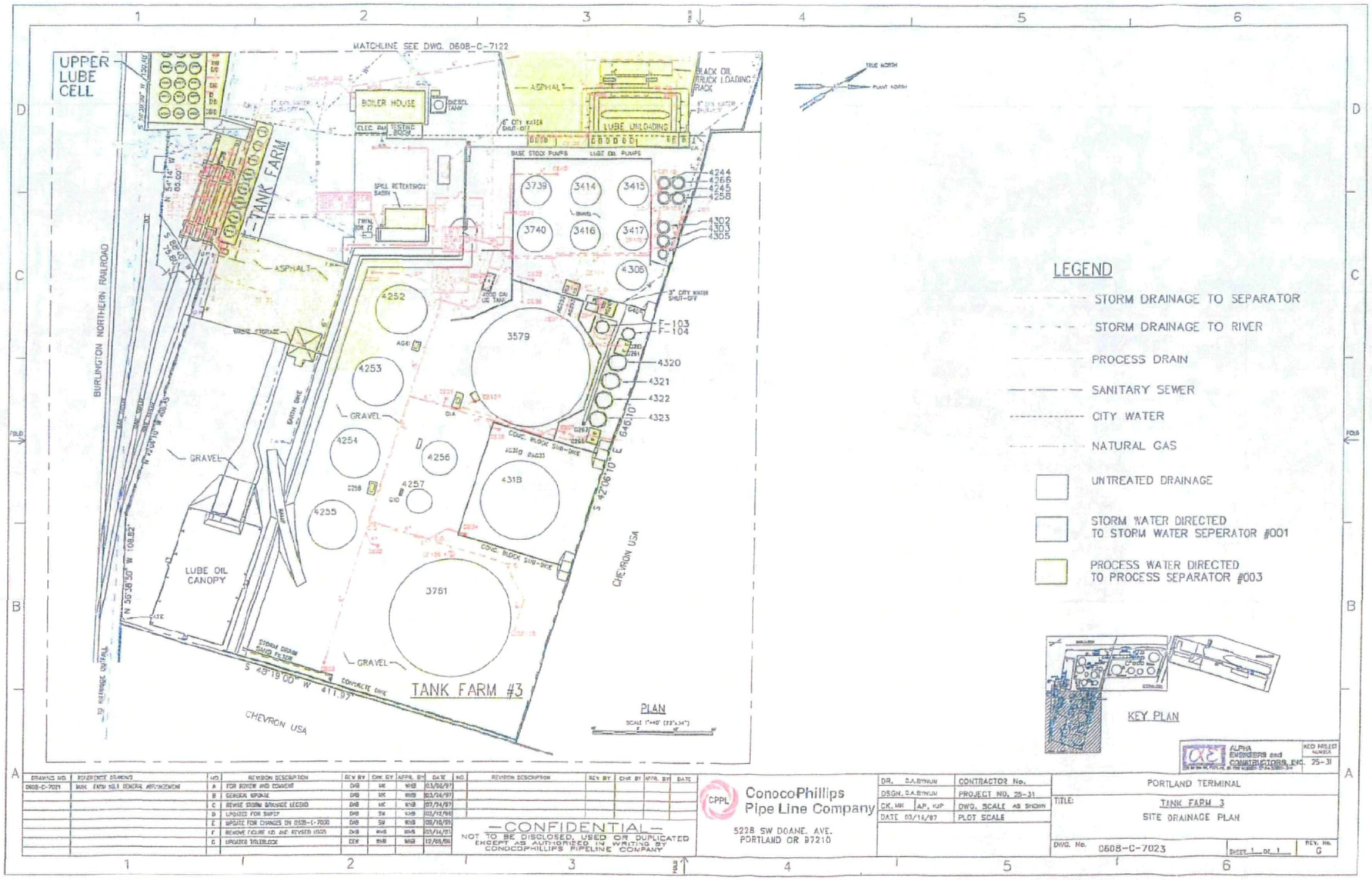
DR. DJB/TMJM	CONTRACTOR No.
DSGN. DJB/TMJM	PROJECT NO. 25-31
CK. MK AP. KJP	DWG. SCALE AS SHOWN
DATE 03/16/97	PLOT SCALE

ALPHA ENGINEERS and CONSTRUCTORS, INC.
ACE PROJECT NUMBER 25-31

PORTLAND TERMINAL

TITLE: TANK FARM 1
SITE DRAINAGE PLAN

DWG. No. 0608-C-7022 SHEET 1 OF 1 REV. No. G



GRAPHICS NO.	REFERENCE DRAWINGS
0608-C-7021	MAIN FARM NO.3 GENERAL ARRANGEMENT

NO	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENT	DAB	MK	MKB	03/04/97
B	GENERAL UPDATE	DAB	MK	MKB	03/24/97
C	REVISE STORM DRAINAGE LEGEND	DAB	MK	MKB	07/24/97
D	UPDATES FOR SWPCP	DAB	TH	MKB	09/12/98
E	UPDATE FOR CHANGES ON 0528-C-7020	DAB	SW	MKB	05/18/99
F	REMOVE FIGURE ID, AND REVISED LEGEND	DAB	RMB	RMB	03/14/01
G	UPDATED TITLEBLOCK	DEW	RMB	MKB	12/05/06

REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

ConocoPhillips Pipe Line Company
5228 SW DOANE. AVE.
PORTLAND OR 97210

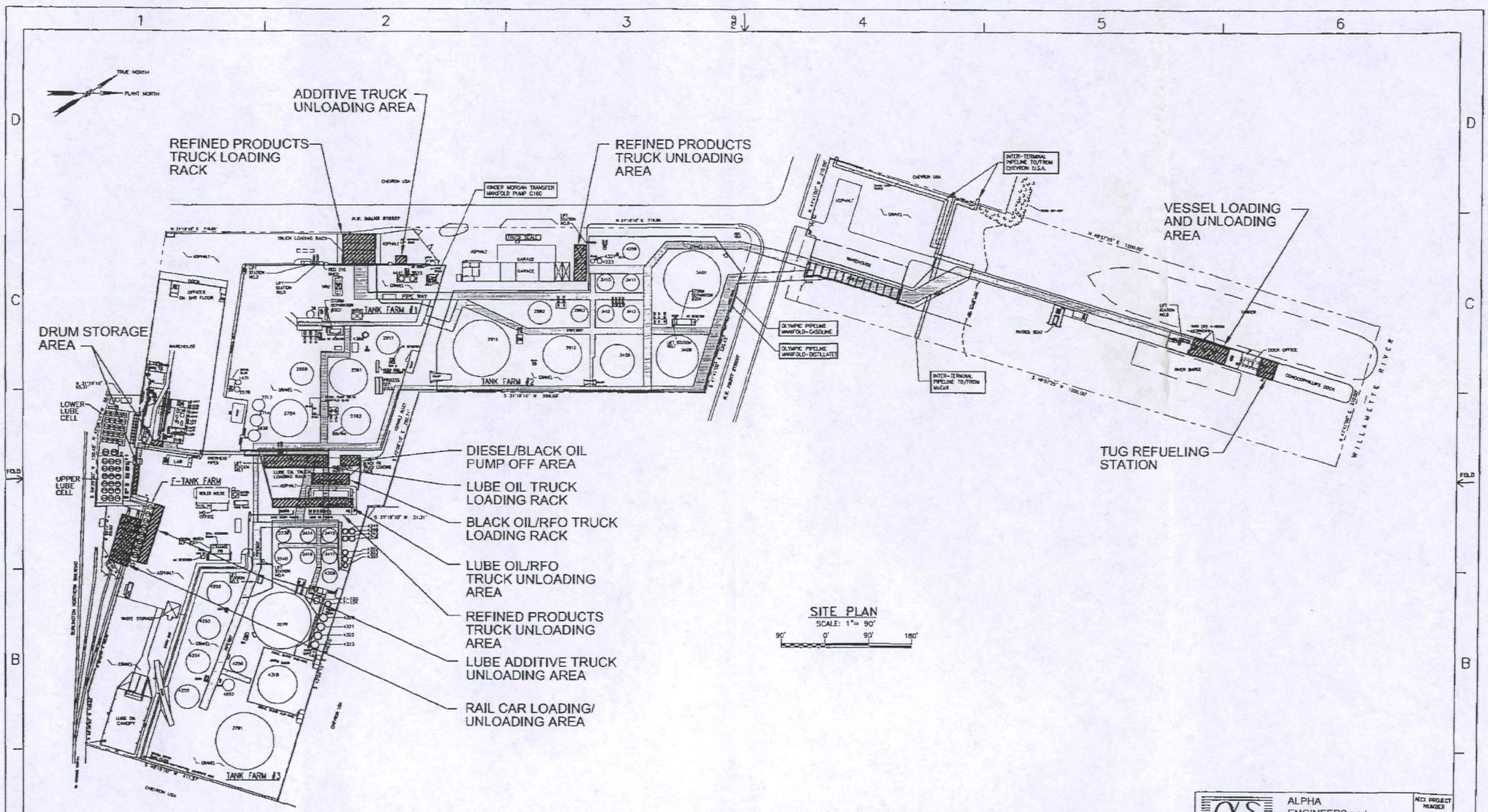
DR. D.A.BYNUM	CONTRACTOR No.
DSGN. D.A.BYNUM	PROJECT NO. 25-31
CK. MK / AP. KJP	DWG. SCALE AS SHOWN
DATE 03/16/97	PLOT SCALE

ALPHA ENGINEERS and CONSULTATORS, INC. — ACO PROJECT NUMBER 25-31

PORTLAND TERMINAL

TITLE: TANK FARM 3
SITE DRAINAGE PLAN

DWG. No. 0608-C-7023 — SHEET 1 OF 1 — REV. No. G



SITE PLAN
SCALE: 1"= 90'
90' 0' 90' 180'

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
-		0	FOR INFORMATION ONLY	DAB	KJP		09/12/97
		1	UPDATED FOR SPCC PLAN	DAB	WHB		03/13/00
		2	REMOVE VEHICLE FUELING, ADD D. STORAGE	DKB	WHB		03/14/04
		3	ADD LUBE CANOPY	DAB	WHB		02/28/06
		4	GENERAL REVISION	CWP	DAB	DAB	04/14/08

NO. | REVISION DESCRIPTION | REV BY | CHK BY | APPR. BY | DATE

ConocoPhillips Pipe Line Company
5528 NW DOANE ST
PORTLAND, OREGON 97210

DR. D.A.BYNUM		CONTRACTOR No.	
DSGN. D.A.BYNUM		PROJECT NO. 25-31	
CK. WHB	AP.	DWG. SCALE AS SHOWN	
DATE 07/30/97		PLOT SCALE	

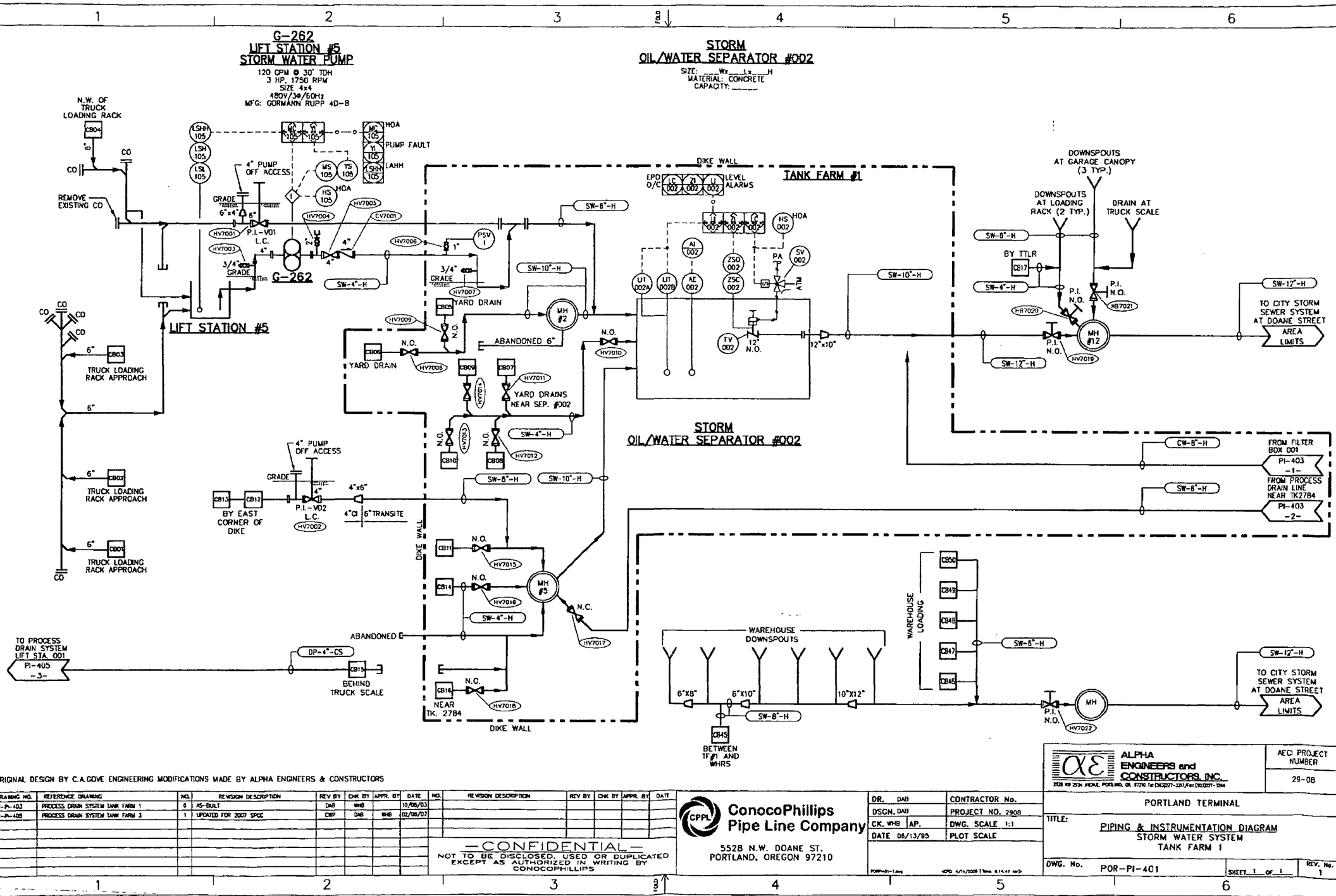
ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29th AVE. PORTLAND, OR. 97210 Tel:(503)227-3311/Fax:(503)227-3244

ACI PROJECT NUMBER 25-31

PORTLAND TERMINAL

TITLE: SITE PLAN TRANSFER LOCATIONS

DWG. No. 0608-C-1201 | SHEET 1 OF 3 | REV. No. 4



ORIGINAL DESIGN BY C.A.GOVE ENGINEERING MODIFICATIONS MADE BY ALPHA ENGINEERS & CONSTRUCTORS

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-403	PROCESS DRAIN SYSTEM TANK FARM 1	0	AS-BUILT	DAB	WHB		10/08/03
POR-PI-405	PROCESS DRAIN SYSTEM TANK FARM 3	1	UPDATED FOR 2007 SPCC	DBP	DAB	WHB	02/06/07

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

DR.	DAB	CONTRACTOR No.	
DSGN.	DAB	PROJECT NO.	2908
CK.	WHB / AP.	DWG. SCALE	1:1
DATE	06/13/95	PLOT SCALE	

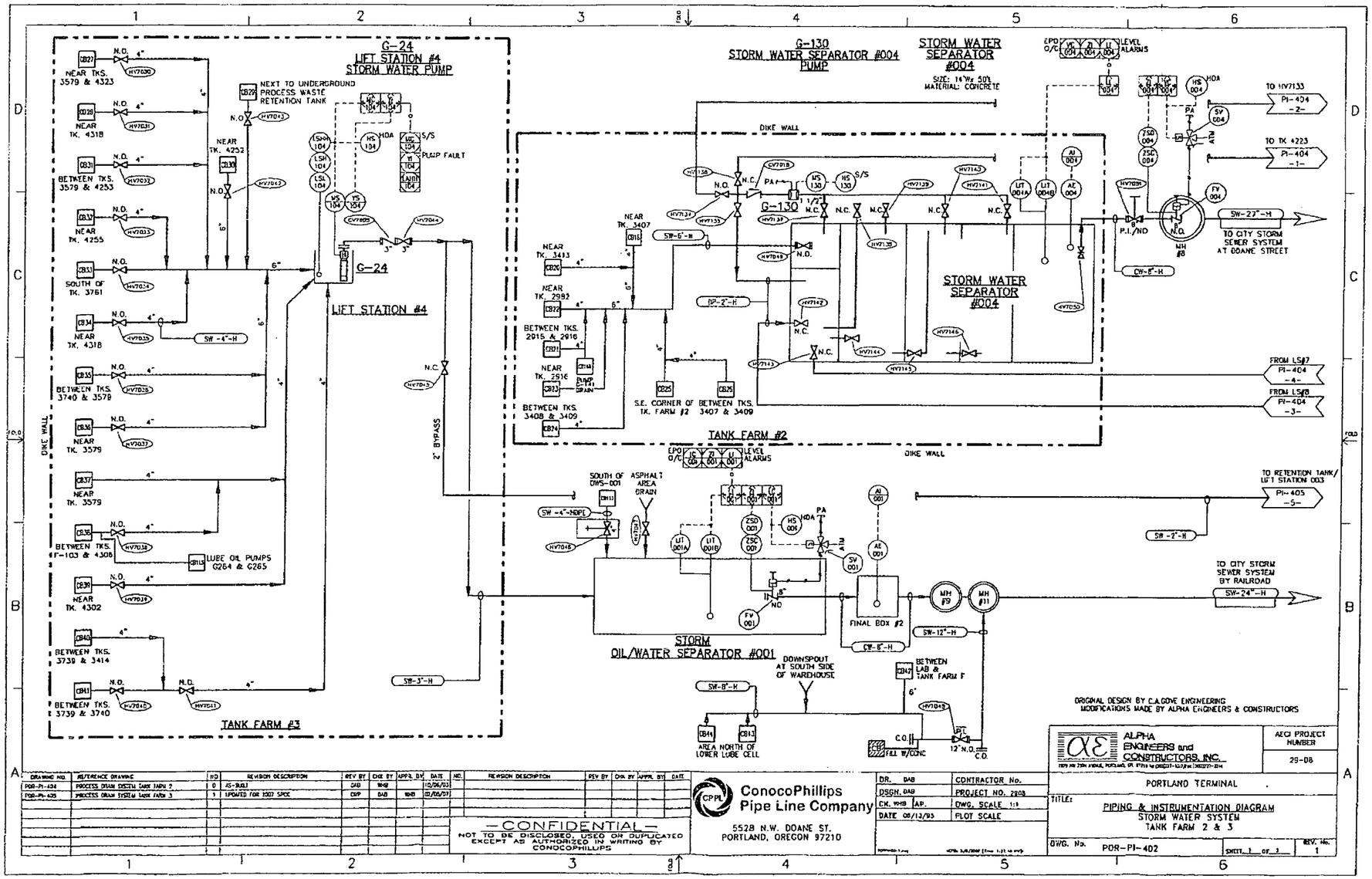
ALPHA ENGINEERS and CONSTRUCTORS, INC.
2525 NW 25th AVENUE, PORTLAND, OR. 97210 Tel:(503)227-3311/Fax:(503)227-3244

AECI PROJECT NUMBER: 29-08

PORTLAND TERMINAL

TITLE:
PIPING & INSTRUMENTATION DIAGRAM
STORM WATER SYSTEM
TANK FARM 1

DWG. No. POR-PI-401 | SHEET 1 OF 1 | REV. No. 1



DRAWING NO.	REFERENCE DRAWING
POR-PI-404	PROCESS DRAIN SYSTEM TANK FARM 2
POR-PI-405	PROCESS DRAIN SYSTEM TANK FARM 3

NO	REVISION DESCRIPTION	DEV BY	CHK BY	APP'S BY	DATE
0	AS-BUILT	DAB	MHB		10/06/93
1	UPDATED FOR 1997 SPCC	CWP	DAB	MHB	01/09/97

NO.	REVISION DESCRIPTION	DEV BY	CHK BY	APPR. BY	DATE

ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2908
CK. MHB AP.	DWG. SCALE 1:1
DATE 08/13/93	PLOT SCALE

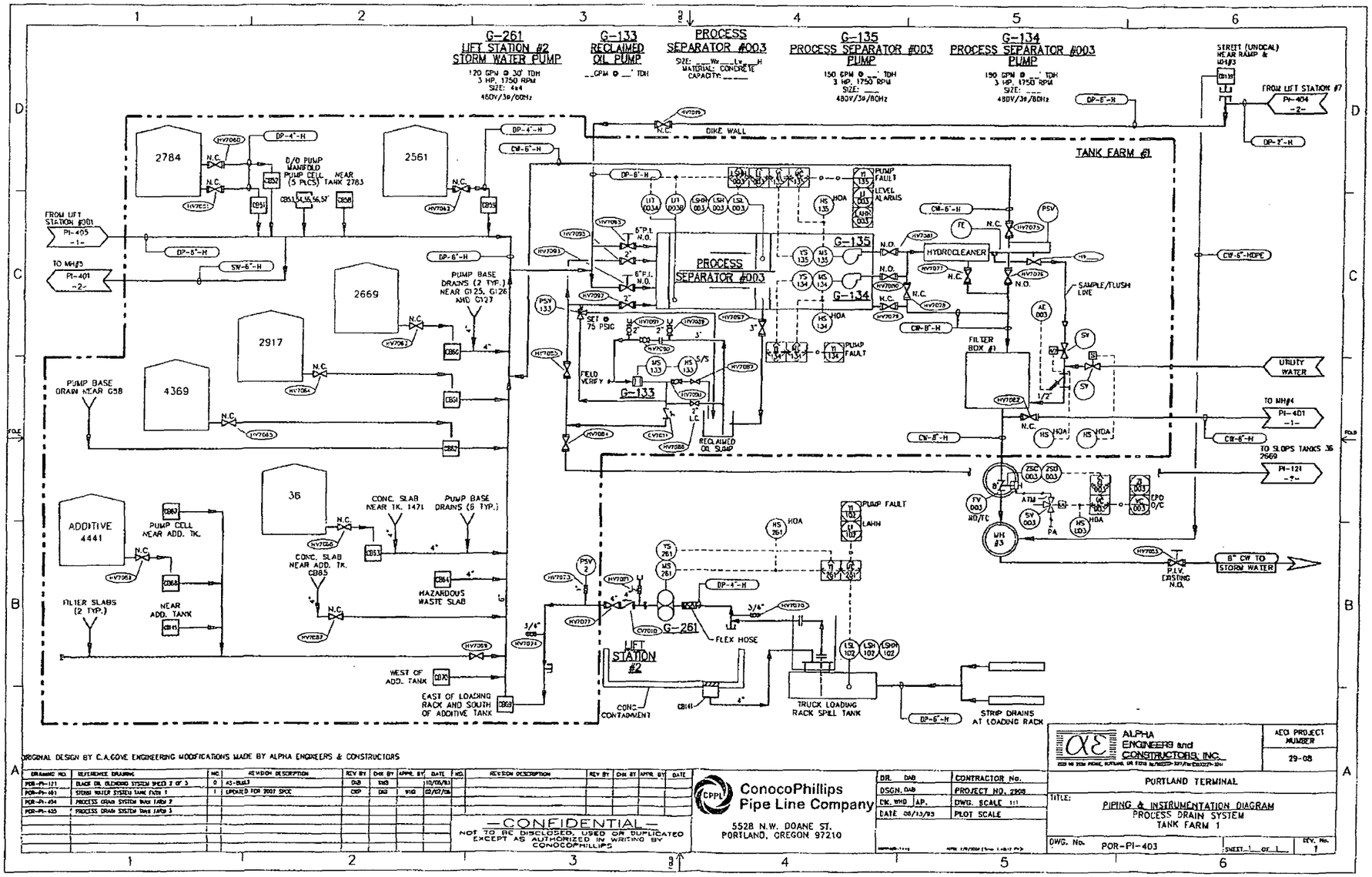
ALPHA ENGINEERS and CONSTRUCTORS, INC.

AEC PROJECT NUMBER 29-08

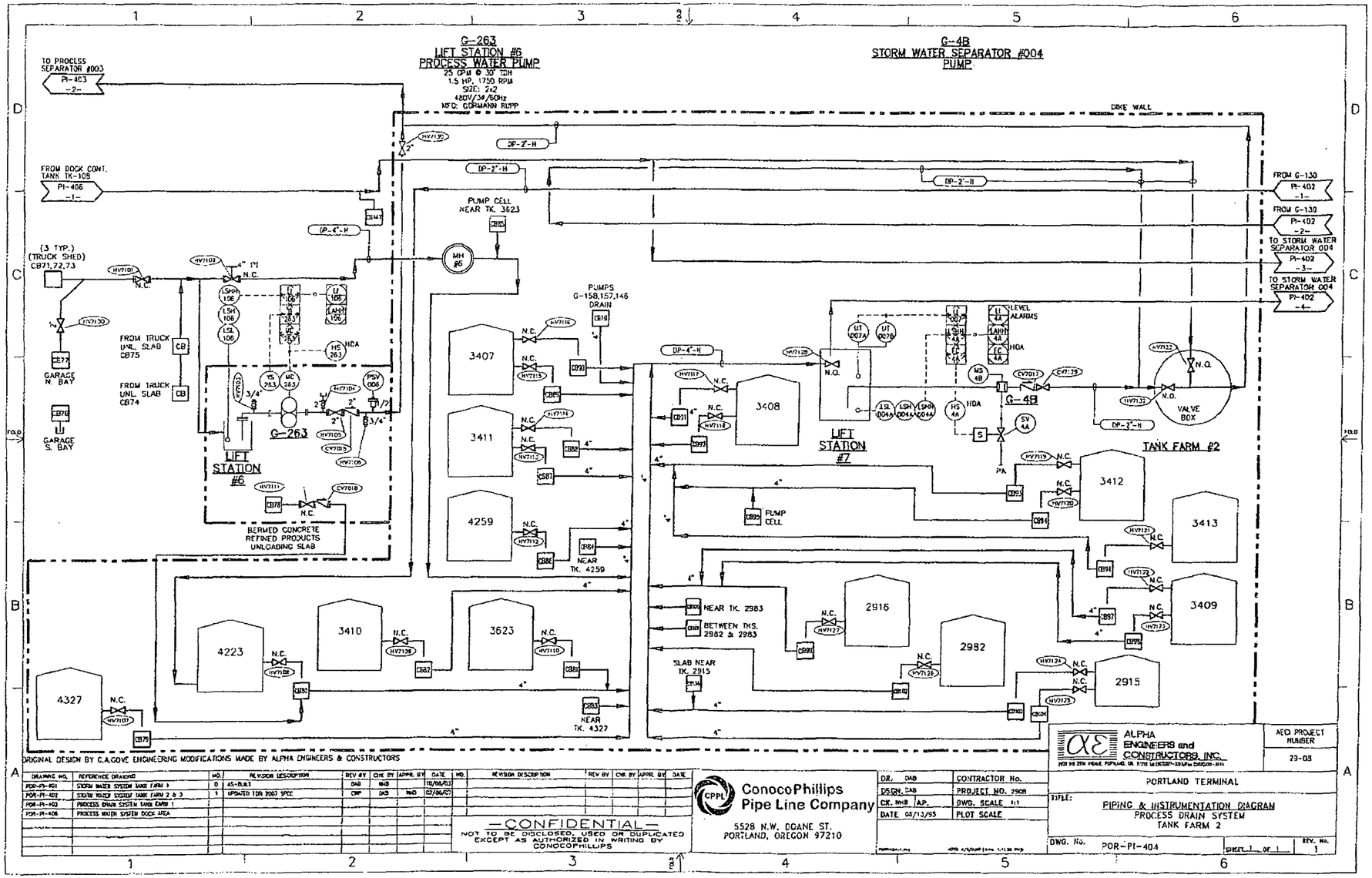
PORTLAND TERMINAL

TITLE: PIPING & INSTRUMENTATION DIAGRAM
STORM WATER SYSTEM
TANK FARM 2 & 3

DWG. No. POR-PI-402 | SHEET 1 OF 1 | REV. No. 1



DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-121	BLACK OIL BLENDING SYSTEM SHEET 2 OF 3	0	AS-BUILT	DAB	WHD		10/09/93
POR-PI-401	STORM WATER SYSTEM TANK FARM 1	1	UPDATED FOR 2007 SPCC	CWP	DAB	WHD	03/07/08
POR-PI-404	PROCESS DRAIN SYSTEM TANK FARM 2						
POR-PI-405	PROCESS DRAIN SYSTEM TANK FARM 3						



ORIGINAL DESIGN BY C.A.GOVE ENGINEERING MODIFICATIONS MADE BY ALPHA ENGINEERS & CONSTRUCTORS

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-401	STORM WATER SYSTEM TANK FARM 1	0	AS-BUILT	DAB	RHB		10/06/93
POR-PI-402	STORM WATER SYSTEM TANK FARM 2 & 3	1	UPDATED FOR 2002 SPCC	CMP	DAB	RHB	07/06/07
POR-PI-403	PROCESS DRAIN SYSTEM TANK FARM 1						
POR-PI-406	PROCESS WATER SYSTEM DOCK AREA						

REV. NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2908
CK. RHB AP.	DWG. SCALE 1:1
DATE 08/13/93	PLOT SCALE

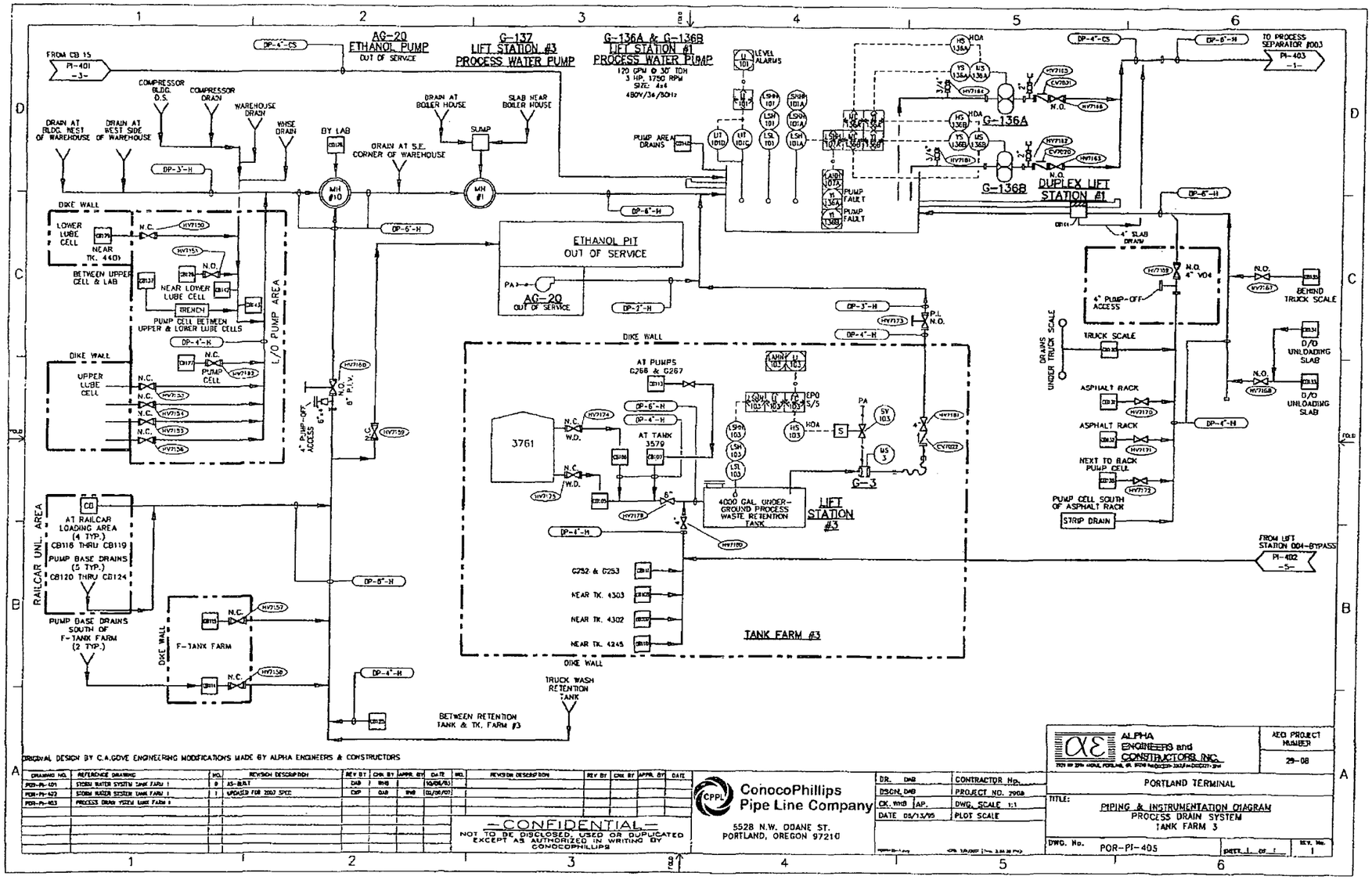
ALPHA ENGINEERS and CONSTRUCTORS, INC.

AEC PROJECT NUMBER 23-03

PORTLAND TERMINAL

TITLE: PIPING & INSTRUMENTATION DIAGRAM
PROCESS DRAIN SYSTEM
TANK FARM 2

DWG. No. POR-PI-404 | SHEET 1 OF 1 | REV. No. 1



G-269
SECONDARY PUMP
MFG.: WARREN PUMP
TYPE: DOUBLE DIAPHRAGM
CAP.: 50 GPM @ 180' TDH
MFR: DIAPHRAGM
MOTOR: AIR 100 PSI

G-274
PRIMARY PUMP
MFG.: BACKEMEYER
TYPE: PD MODEL 2006
CAP.: 50 GPM @ 180' TDH
SIZE: 3 VANE
MOTOR: 7.5HP @ 1750RPM
4TON, 3PH, 60HZ
MATL.: CAST IRON

TK-108
DOCK CONTAINMENT TANK
SIZE: 5'-0" DIA. x 13'-11 3/4" LG.
DESIGN SG.: 0.9 - 1.0
DESIGN TEMP.: AMBIENT
CAP.: 2000 GALS.
TYPE: SINGLE WALL STAINLESS STEEL

DOCK
3" GRAVITY DRAIN
TO LIFT STATION #7 PI-404
PLANT AIR
ON/OFF
PUMP FAIL
HOA
S/S
LAHH
LAH
LAL
LAHH
VENT
SHIP/BARGE LOADING/UNLOADING CONTAINMENT AREA
TUG FUEL AREA
HEAT ALARM

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-404	PROCESS DRAIN SYSTEM TANK FARM 2	0	AS-BUILT	DAB	KMB		10/08/03
		1	2 ISSUED FOR 2007 SPCC	DEP	DAB	KMB	03/08/07

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2808
CK. KMB AP.	DWG. SCALE 1:1
DATE 08/13/03	PLOT SCALE

ALPHA ENGINEERS and CONSTRUCTORS, INC.

AECI PROJECT NUMBER 25-08

PORTLAND TERMINAL

TITLE: PIPING & INSTRUMENTATION DIAGRAM
PROCESS WATER SYSTEM
DOCK AREA

DWG. No. POR-PI-409 | SHEET 1 OF 1 | REV. No. 1

Appendix D
Oil Spill Contingency Plan

This SPCC Plan will become part of the Facility Response & Oil Spill Contingency Plan.

Appendix E
Calculations

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 1						
Storage tank	36	Slop Oil	Rupture or overfill	21,933 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of Tank Farm 1 (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 4,150,608 gallons
Storage tank	1471	Hydraulic Tractor Fluid	Rupture or overfill	19,491 gallons		
Storage tank	2561	Marine Fuel Oil	Rupture or overfill	1,865,039 gallons		
Storage tank	2579	Hydraulic Tractor Fluid	Rupture or overfill	20,142 gallons		
Storage tank	2669	Marine Diesel	Rupture or overfill	477,164 gallons		
Storage tank	2713	Unax AW 46	Rupture or overfill	118,440 gallons		
Storage tank	2714	Guardol 15W/40	Rupture or overfill	118,440 gallons		
Storage tank	2783	Decant Oil	Rupture or overfill	985,230 gallons		
Storage tank	2784	Diesel #2	Rupture or overfill	1,458,514 gallons		
Storage tank	2917	RLOP 220 N	Rupture or overfill	649,728 gallons		
Storage tank	3623	HiTec 6576	Rupture or overfill	20,368 gallons		
Storage tank	3639	Super Syn Bl 5W/30	Rupture or overfill	132,188 gallons		
Storage tank	4369	RLOP 220 N	Rupture or overfill	20,368 gallons		
Storage tank	4441	Octel 8056	Rupture or overfill	20,368 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell HL)	Direction of Flow	Containment Systems
Tank Farm 2						
Storage tank	2915	Unleaded Gasoline	Rupture or overfill	3,450,580 gallons	See attached *drainage plan*	Tank farm dike; Total containment capacity of Tank Farm 2 (total area *inside tank farm dike minus the total areas of all the tanks except the* largest) equals 4,575,564 gallons
Storage tank	2916	Diesel#1/Diesel #2	Rupture or overfill	1,717,760 gallons		
Storage tank	2982	Diesel #1	Rupture or overfill	487,298 gallons		
Storage tank	2983	RLOP 220 N	Rupture or overfill	319,788 gallons		
Storage tank	3407	Unleaded Gasoline	Rupture or overfill	3,384,000 gallons		
Storage tank	3408	Unleaded Gasoline	Rupture or overfill	1,903,500 gallons		
Storage tank	3409	Unleaded Gasoline	Rupture or overfill	1,151,500 gallons		
Storage tank	3410	Ethanol	Rupture or overfill	302,269 gallons		
Storage tank	3411	Unleaded Gasoline	Rupture or overfill	302,269 gallons		
Storage tank	3412	Diesel #1	Rupture or overfill	302,269 gallons		
Storage tank	3413	Unleaded Gasoline	Rupture or overfill	302,269 gallons		
Storage tank	4223	Slop Oil	Rupture or overfill	20,368 gallons		
Storage tank	4259	Transmix	Rupture or overfill	230,300 gallons		
Storage tank	4327	Gasoline Slops	Rupture or overfill	10,187		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 3						
Storage tank	3414	RLOP 220 N	Rupture or overfill	222,360 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of Tank Farm 3 (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 4,296,390 gallons
Storage tank	3415	SUN 525	Rupture or overfill	222,075 gallons		
Storage tank	3416	RLOP 100 N	Rupture or overfill	222,075 gallons		
Storage tank	3417	Ultra S-4	Rupture or overfill	222,075 gallons		
Storage tank	3578	Industrial Fuel Oil	Rupture or overfill	3,384,000 gallons		
Storage tank	3739	SUN 150 B/S	Rupture or overfill	222,075 gallons		
Storage tank	3740	RLOP 600 N	Rupture or overfill	302,269 gallons		
Storage tank	3761	Diesel #2	Rupture or overfill	3,384,000 gallons		
Storage tank	4244	Mohawk 450	Rupture or overfill	20,368 gallons		
Storage tank	4245	SUN 525	Rupture or overfill	20,368 gallons		
Storage tank	4252	Residual Fuel Oil	Rupture or overfill	470,000 gallons		
Storage tank	4253	Residual Fuel Oil	Rupture or overfill	470,000 gallons		
Storage tank	4254	PS 300	Rupture or overfill	470,000 gallons		
Storage tank	4255	Bio Diesel	Rupture or overfill	470,000 gallons		
Storage tank	4256	Out of Service	Rupture or overfill	230,300 gallons		
Storage tank	4257	Out of Service	Rupture or overfill	58,750 gallons		
Storage tank	4258	Line Clippings	Rupture or overfill	20,368 gallons		
Storage tank	4268	Flush	Rupture or overfill	20,368 gallons		
Storage tank	4302	RLOP 600 N	Rupture or overfill	20,368 gallons		
Storage tank	4303	RLOP 100 N	Rupture or overfill	20,368 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 3 (cont'd.)						
Storage tank	4305	Out of Service	Rupture or overfill	10,187 gallons		
Storage tank	4306	RLOP 100 N	Rupture or overfill	223,175 gallons		
Storage tank	4318	Diesel #2	Rupture or overfill	1,828,200 gallons		
Storage tank	4320	Sup Syn BL 10W/30	Rupture or overfill	42,575 gallons		
Storage tank	4321	Uniguide II 100	Rupture or overfill	42,575 gallons		
Storage tank	4322	TSX HD 15W/40	Rupture or overfill	42,575 gallons		
Storage tank	4323	Super ATF	Rupture or overfill	42,575 gallons		
Storage tank	F103	UTRA 58	Rupture or overfill	29,375 gallons		
Storage tank	F104	UTRA 58	Rupture or overfill	21,726 gallons		
F Tank Farm						
Storage tank	4335	Utility	Rupture or overfill	20,368 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of F Tank Farm (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 16,338 gallons; The F Tank Farm is equipped with an open catch basin connected the process water system, which significantly increases the effective containment capacity of the F Tank Farm.
Storage tank	4336	Utility	Rupture or overfill	20,368 gallons		
Storage tank	4337	Utility	Rupture or overfill	20,368 gallons		
Storage tank	4436	Unax AW 32	Rupture or overfill	19,920 gallons		
Storage tank	4437	Unax WR 32	Rupture or overfill	19,930 gallons		
Storage tank	F10	Utility	Rupture or overfill	6,380 gallons		
Storage tank	F11	Utility	Rupture or overfill	6,380 gallons		
Storage tank	F12	Utility	Rupture or overfill	6,380 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Upper Lube Cell						
Storage tank	3741	Ramar CLF 17E	Rupture or overfill	20,368 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of the Upper Lube Cell (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 42,378 gallons; Additionally, the Upper Lube Cell is equipped with an open catch basin connected the process water system, which significantly increases the effective containment capacity of the Upper Lube Cell.
Storage tank	3742	MP 80/90	Rupture or overfill	20,368 gallons		
Storage tank	3743	Utility	Rupture or overfill	20,368 gallons		
Storage tank	3744	HYNAP N 100	Rupture or overfill	20,368 gallons		
Storage tank	3745	HITEC 5751	Rupture or overfill	20,368 gallons		
Storage tank	3746	Lubrizol 4998C	Rupture or overfill	20,368 gallons		
Storage tank	3747	Lubrizol 4990CH	Rupture or overfill	20,368 gallons		
Storage tank	3757	HITEC 1193	Rupture or overfill	20,368 gallons		
Storage tank	3760	Raffene 750L	Rupture or overfill	20,368 gallons		
Storage tank	4191	Lubrizol 46254	Rupture or overfill	20,368 gallons		
Storage tank	4192	Lubrizol 7075F	Rupture or overfill	20,368 gallons		
Storage tank	4241	Unax AW 68	Rupture or overfill	20,368 gallons		
Storage tank	4242	Unax AW 68	Rupture or overfill	20,368 gallons		
Storage tank	4243	HT4/10W	Rupture or overfill	20,368 gallons		
Storage tank	4281	Versa Tran ATF	Rupture or overfill	20,368 gallons		
Storage tank	4332	Super ATF	Rupture or overfill	20,368 gallons		
Storage tank	4333	Point Premier 10W/30	Rupture or overfill	20,368 gallons		
Storage tank	4334	Super 5W/20	Rupture or overfill	20,368 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Lower Lube Cell						
Storage tank	4300	Ramar CLF 17E	Rupture or overfill	29,375 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of the Lower Lube Cell (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 47,334 gallons; Additionally, the Lower Lube Cell is equipped with an open catch basin connected the process water system, which significantly increases the effective containment capacity of the Lower Lube Cell.
Storage tank	4331	Ethyl HiTec 6888 E	Rupture or overfill	29,375 gallons		
Storage tank	4388	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4389	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4390	Bar & Chain 150	Rupture or overfill	12,154 gallons		
Storage tank	4391	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4392	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4393	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4394	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4395	Utility	Rupture or overfill	12,154 gallons		
Storage tank	4397	Lubrizol 9682A	Rupture or overfill	12,154 gallons		
Storage tank	4398	HITEC 1193A	Rupture or overfill	12,154 gallons		
Storage tank	4399	Firebird 15W/40	Rupture or overfill	12,154 gallons		
Storage tank	4400	Guardol 30	Rupture or overfill	12,154 gallons		
Storage tank	4401	Mohaw 150	Rupture or overfill	12,154 gallons		
Storage tank	4402	TSX HD 10	Rupture or overfill	12,154 gallons		
Storage tank	4403	HT4/30W	Rupture or overfill	12,154 gallons		
Storage tank	4404	Fleet Sup EC 15W/40	Rupture or overfill	12,154 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Lower Lube Cell (cont'd.)						
Storage tank	4405	HITEC 3472	Rupture or overfill	12,154 gallons		
Storage tank	4406	Lubrizol 9990A	Rupture or overfill	12,154 gallons		
Storage tank	4407	HITEC 388	Rupture or overfill	12,154 gallons		
Storage tank	4408	HITEC 5756	Rupture or overfill	12,154 gallons		
Lube Blending Warehouse						
Storage tank	4338	Conoco AN 801	Rupture or overfill	1,008 gallons	See attached drainage plan	The warehouse is equipped with two means of secondary containment. The Blending and Container Filling Areas are equipped with concrete floors sloped to catch basins that drain to two 5,000-gallon underground spill containment tanks located at the south end of the warehouse. The Package Storage Area is equipped with a concrete floor and curbing along the north side and northeast corner of the warehouse to prevent potential spills from packages products along that side, or additive tanks in the northeast corner, from migrating from the building.
Storage tank	4339	Ethyl HITEC 534	Rupture or overfill	1,008 gallons		
Storage tank	4340	Ethyl HITEC 385	Rupture or overfill	1,008 gallons		
Storage tank	4341	Utility	Rupture or overfill	1,008 gallons		
Storage tank	4342	HITEC 008	Rupture or overfill	1,008 gallons		
Storage tank	4343	Viscoplex 1-302	Rupture or overfill	1,008 gallons		
Storage tank	4344	Oleic Acid / Emersol 213	Rupture or overfill	1,008 gallons		
Storage tank	4345	Lubrizol 8790	Rupture or overfill	1,008 gallons		
Storage tank	4346	Utility	Rupture or overfill	1,008 gallons		
Storage tank	4347	Utility	Rupture or overfill	1,008 gallons		
Storage tank	F-8	Utility	Rupture or overfill			
Storage tank	F-9	Line Clippings	Rupture or overfill			
Storage tank	F-13	Slops - Under Lab	Rupture or overfill			
Storage tank	F-14	Flush - Under Lab	Rupture or overfill			

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Truck and Railcar Loading/Unloading Areas						
Refined Products Truck Loading Rack	NA	Gasoline, diesel, kerosene, ethanol and transmix	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The Refined Products Loading Rack utilizes vapor recovery and overfill protection/brake interlock systems. Trucks are equipped with high-level sensors. The drivers are responsible for presetting loading volumes and are in attendance at all times. The rack is surrounded by a sloped concrete slab. Runoff from the slab is into strip drains that lead to a 10,000 gallon spill containment tank. The secondary containment at the rack and containment tank is sufficient to contain the maximum anticipated spill.
			Compartment rupture	4,000 gallons (maximum)		
			Valve failure	100-200 gpm		
Gasoline Additive Truck Unloading Area	NA	Gasoline additives	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	The area is graded such that spills will flow towards the Refined Products Loading Rack containment area. Spills in this area could also flow to a storm water catch basin that drains to a storm water separator in Tank Farm 1. Therefore, terminal procedures require operators to seal off the catch basin with a magnetic cover during additive transfers such that the spills will pond in the area to facilitate recovery.
			Valve failure	100-200 gpm		
Refined Products Truck Unloading Area	NA	Gasoline and ethanol	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	A spill will flow to catch basins located in the center of the concrete containment pad and then into the process water system. The secondary containment can contain a spill of the maximum size anticipated. During the transfer of ethanol, the catch basin lift pump is shutdown to prevent an ethanol spill from entering the process system and dissolving into water.
			Valve failure	100-200 gpm		
Diesel/Black Oil Pump Off Area	NA	Diesel and black oils	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	A spill will be contained by perimeter curbing and catch basins that drain to the process water system.
			Valve failure	100-200 gpm		
Lube Oil Truck Loading Rack	NA	Lube oils	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The Lube Oil Truck Loading Rack area is paved and equipped with asphalt and concrete berms. Several catch basins drain the area to the process water system. The rack is equipped with a deadman switch that requires constant pressure from the operator to continue loading operations. Therefore, an operator has to be present at all times during loading of lube oils. The area is designed to contain the largest foreseeable spill of 5,000 gallons which is the largest compartment of a typical tank truck or trailer.
			Compartment rupture	5,000 gallons (maximum)		
			Valve failure	100-200 gpm		
Black Oil/RFO Truck Loading Rack	NA	Black oils and re-refined oils	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The Black Oil/RFO Truck Loading Rack area is paved and equipped with asphalt and concrete berms. Several catch basins drain the area to the process water system. The rack is equipped with a deadman switch that requires constant pressure from the operator to continue loading operations. Therefore, an operator has to be present at all times during loading. The area is designed to contain the largest foreseeable spill of 4,000 gallons which is the largest compartment of a typical tank truck or trailer.
			Compartment rupture	4,000 gallons (maximum)		
			Valve failure	100-200 gpm		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Truck and Railcar Loading/Unloading Areas (cont'd.)						
Lube Oil/RFO Truck Unloading Area	NA	Lube oils and re-refined oils	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	A spill will be contained by perimeter curbing and catch basins that drain to the process water system.
			Valve failure	100-200 gpm		
Lube Additive Truck Unloading Area	NA	Lube oil additives	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The area is paved but not equipped with a dedicated containment system. As a result, operators place a cover over the nearby storm water catch basin during additive transfers. This prevents spills from entering the storm water system and causes the spill to continue down gradient into the a process water system catch basin.
			Compartment rupture	5,000 gallons (maximum)		
			Valve failure	100-200 gpm		
Railcar Loading/Unloading Area	NA	Lube base stocks, additives, finished lube oils; black oil	Railcar overfill	400 gpm (maximum)	See attached drainage plans	The Rail Car Loading/Unloading area is surrounded by a sloped gravel area and asphalt containment berm along the northwest perimeter of the area. Smaller sloped concrete slabs are located under each of the four transfer stations for the rack, and are equipped with catch basins that drain to the process water system. The combination of the concrete slabs, catch basins, and asphalt berms provide containment area for at least 30,000 gallons. Railcars are also loaded and unloaded under the supervision of terminal personnel. Operators are required to check the railcars and transfer equipment every 20 minutes and be present during the loading of the last 2,000 gallons. Operators are required to be present if offloading hazardous materials.
			Railcar rupture	30,000 gallons (maximum)		
			Valve failure	100 - 400 gpm		
Marine Dock						
Marine Transfers	NA	Gasoline, diesel, kerosene, black oil, and lube oil	Cargo hose failure	140,880 gallons (assumes 5 minute detection and shutdown, four hoses in use, simultaneous rupture, complete drainage following shutdown)	See attached drainage plans	The marine dock manifold/riser area is surrounded by sloped concrete and bermed around the perimeter. The containment area drains to a 2,000 gallon spill containment tank beneath the dock, which is equipped with level-control activated pumps that pump any spilled product to the process water system. Transfer operations at the marine dock are conducted under the continual supervision of terminal and vessel personnel and in accordance with U.S. Coast Guard regulations. In the unlikely event of a spill at the marine dock or tug refueling area, terminal personnel will deploy a floating spill containment boom to encircle and contain the spill if it is safe to do so. Permanent floating boom is positioned around the dock to contain spilled product under the dock. Containment of gasoline spills is rarely, if ever, recommended due to the associated fire and explosion hazard.
				5,600 gpm (offloading); 2,100 gpm (loading)		
Tug Fueling			Hose failure	18,000 gpm (maximum)	See attached drainage plans	The tug refueling area at the dock is equipped with a similar containment system, which also drains to the holding tank.

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ConocoPhillips

Combined

Stormwater Pollution Control Plan (SWPCP)

and

Accidental Spill Prevention Plan (ASPP)

Oregon Department of Environmental Quality

1200Z General Permit

Site ID No. OR000138-4, File No. 90845

City of Portland

Industrial Wastewater Permit

Permit Number 400.181

ConocoPhillips Portland Terminal

5528 NW Doane Avenue

Portland, Oregon 97210

Multnomah County

503-248-1565

July 23, 2007

Lyons, Thomas:

From: Collins, Bill:
Sent: Thursday, May 29, 2008 10:27 AM
To: Lyons, Thomas:
Subject: FW: ASPP Plan

From: Deberry, Eric [mailto:ERICD@bes.ci.portland.or.us]
Sent: Thursday, May 29, 2008 10:15 AM
To: Collins, Bill:
Subject: RE: ASPP Plan

Bill,
The existing plan meets our requirements. Thanks.

From: Collins, Bill: [mailto:William.H.Collins@conocophillips.com]
Sent: Monday, May 19, 2008 9:39 AM
To: ericd@bes.ci.portland.or.us
Subject: FW: ASPP Plan

Eric, We've received our new permit for waste water discharge at the Portland Terminal. Last July, we revised our plan and combined the ASPP with the SWPPP. You received a copy. We review our plan at least annually. Given that we sent you a revised plan last July, and have either reviewed our plan or will review it this year, do we need to submit a revised plan in association with the new permit? Bill Collins

---

From: Lyons, Thomas:
Sent: Friday, May 16, 2008 10:22 AM
To: Collins, Bill:
Subject: ASPP Plan

Bill

We have an SAP PM work order to submit a new or revised 5-year Accidental Spill Prevention Plan (ASPP) to the Industrial Wastewater Management Section.

However, you submitted the combined plan last July. Do we still need to submit a revised plan?

Tom Lyons
Facility Supervisor
Portland Terminal
503-248-1572
503-849-9604, cell

ConocoPhillips Company
Health, Safety & Environmental Department
5528 N.W. Doane Avenue
Portland, OR 97210

CERTIFIED MAIL 7005 3110 0002 7889 8058

July 31, 2007

Mr. Tom Rosetta
Water Quality Specialist/General Permitting
Oregon Department of Environmental Quality
Northwest Region Office
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201

RE: Combined Stormwater Pollution Control Plan and Accidental Spill Prevention Plan
ConocoPhillips Portland Terminal
5528 NW Doane Avenue, Portland, Oregon

Dear Mr. Rosetta,

Please find enclosed a copy of ConocoPhillips Portland Terminal's Combined Stormwater Pollution Control Plan (SWPCP) and Accidental Spill Prevention Plan (ASPP), dated July 23, 2007, for your review. This plan combines the previously separate SWPCP and ASPP and is submitted in accordance with regulations in the Portland Terminal's National Pollutant Discharge Elimination System (NPDES) General Permit 1200-Z (which became effective July 1, 2007) and the City of Portland's Industrial Wastewater Discharge Permit Number 400.181.

ConocoPhillips appreciates DEQ's assistance relative to stormwater issues at our Portland Terminal. If you have any questions or require additional information regarding the enclosed plan, please contact the undersigned at (503) 248-1552.

Sincerely,

William H. Collins
Environmental Coordinator

cc: Steve Kober – Portland Terminal
HSE Files

ConocoPhillips Company
Health, Safety & Environmental Department
5528 N.W. Doane Avenue
Portland, OR 97210

ConocoPhillips

CERTIFIED MAIL 7005 3110 0002 7889 8041

July 31, 2007

Mr. Eric De Berry
Permit Manager - Industrial Pretreatment Program
City of Portland Bureau of Environmental Services
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

RE: Combined Stormwater Pollution Control Plan and Accidental Spill Prevention Plan
ConocoPhillips Portland Terminal
5528 NW Doane Avenue, Portland, Oregon

Dear Mr. De Berry,

Please find enclosed a copy of ConocoPhillips Portland Terminal's Combined Stormwater Pollution Control Plan (SWPCP) and Accidental Spill Prevention Plan (ASPP), dated July 23, 2007, for your review. This plan combines the previously separate SWPCP and ASPP and is submitted in accordance with regulations in the Portland Terminal's National Pollutant Discharge Elimination System (NPDES) General Permit 1200-Z (which became effective July 1, 2007) and the City of Portland's Industrial Wastewater Discharge Permit Number 400.181.

ConocoPhillips appreciates The City of Portland's assistance relative to wastewater issues as our Portland Terminal. If you have any questions or require additional information regarding the enclosed plan, please contact the undersigned at (503) 248-1552.

Sincerely,

William H. Collins
Environmental Coordinator

cc: Steve Kober – Portland Terminal
HSE Files

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1.0 INTRODUCTION AND CERTIFICATION

1.1 Introduction

A Stormwater Pollution Control Plan (SWPCP) was prepared for ConocoPhillips' Portland Terminal in compliance with requirements of National Pollutant Discharge Elimination System (NPDES) General Permit Number 1300-J. General Permit Number 1300-J was most recently renewed for the Portland Terminal on January 11, 2000. The SWPCP was revised on December 15, 2006 and submitted in response to the Oregon Department of Environmental Quality's (DEQ) November 9, 2006 letter requesting an updated version for adoption of the 1200-Z permit as a replacement to the 1300-J permit.

An Accidental Spill Prevention Plan (ASPP) was prepared for ConocoPhillips' Portland Terminal in compliance with the City of Portland's Bureau of Environmental Services (BES) requirements described in the terminal's Industrial Wastewater Discharge Permit. The most recent waste water discharge permit, Permit Number 400.181, was issued to the terminal on May 1, 2003.

This plan combines the previously separate SWPCP and ASPP in to one plan. The combined plan addresses the applicable requirements pertaining to stormwater pollution control and accidental spill prevention plans defined under NPDES General Permit Number 1200-Z and Industrial Waste Discharge Permit number 400.181.

1.2 Management Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature _____ Date 7/24/07

Name Steve Kober Title Northwest Area Supervisor

1.3 Supervisor's Inspection and Plan Review Log

ConocoPhillips' policy is to inspect the Portland Terminal's stormwater and waste (process) water system and annually review the contents of the combined Stormwater Pollution Control Plan (SWPCP) and Accidental Spill Prevention Plan (ASPP), as required by NPDES Permit Number 1200-Z and City of Portland Industrial Waste Discharge Permit number 400.181.

This inspection and review are conducted by the Northwest Area Supervisor and include consideration of any changes in terminal personnel, equipment, tank contents, and control or communication systems. Particular attention should be paid to any modifications to facility design, construction, operation or maintenance which materially effect the facility's potential for the discharge of oil. This would include any modifications to area drainage, tank farm drainage, waste water handling, or equipment installations and additions (i.e., new tanks, loading lanes, or sumps). If any modifications of this nature have been made, the combined SWPCP and ASPP should be reviewed and recertified by the Northwest Area Supervisor. If significant changes are not required, the reviewer must still document that the plan was reviewed. In any event, the plan must be reviewed at least once a year and documented using this form.

Historical SWPCP Table 1-1

Reviewed By	Date	Changes Made
John Sherman	7/01/2002	Section 3.0 updated
John Sherman	7/03/2003	Section 3.0 updated, permit updated appendix A; section 7 and 8 updated
John Sherman	10/6/2004	Updated 5.4.10
Gary Lefebvre	10/8/2004	Updated 3.3, section 4 products stored by tank #, section 4.2.6 updated to include new warehouse
John Sherman	10/26/2004	Updated from Tosco to ConocoPhillips
John Sherman	4/11/2005	No updates needed after review following an oil and grease test result of 15.8 in separator 004
Gary Lefebvre	9/15/2005	Updated table 4-1 pages 1&2, Removed reference to pump G266 and G267, updated 4-14 and 5-1
Gary Lefebvre	9/15/2005	Updated table 4-1 pages 1&2, Removed reference to pump G266 and G267, updated 4-14 and 5-1
Carrie Wildin	1/10/2006	Name changes only
Gary Lefebvre	5/16/2006	Updated table 4-1 pg 1 and 2
Carrie Wildin	12/7/2006	Resubmitted for transfer to NPDES General permit No. 1200-Z from 1300-J

Historical ASPP Table 1-1

Reviewed By	Date	Changes Made
John Sherman	7/01/2002	Section 3.0 updated
John Sherman	7/03/2003	Updated phone numbers and tank contents, and processwater discharge permit
John Sherman	10/6/2004	Updated 4.4, 5.1, 5.4.10
Gary Lefebvre	10/8/2004	Plan reviewed updated 3.3, section 4, 4.26, and 6.3.
John Sherman	10/20/2004	Updated from Tosco to ConocoPhillips
Gary Lefebvre	10/30/2004	Updated tank contents spreadsheet
Gary Lefebvre	9/15/2005	Updated addresses, upgrades in TF3 drainage, 4-13 and 5-1, tank changes in table 4-1, pages 1 & 2
John Sherman	9/17/2005	None
Carrie Wildin	1/10/2006	Name changes only
Gary Lefebvre	5/17/2006	Updated table 4-1 pg 1 and 2
Carrie Wildin	1/15/2007	Resubmitted as combined document with the SWPCP

Combined SWPCP and ASPP Table 1-1

Reviewed By	Date	Changes Made
Tom Lyons	3/28/08	Updated responsible official & phone number Updated storm water contamination log

A copy of this plan should be distributed to the following locations:

- Northwest Area Supervisor/Control Room Area
- Oregon Department of Environmental Quality
- City of Portland, Bureau of Environmental Services

2

2.0 PROCESS

2.1 Site Description, Controls and Plan Objective

Site Description

- Identification of activities conducted, significant materials stored, and methods of stormwater storage, treatment, or disposal.
- General location map showing nearby transportation routes and surface waters.
- Site map indicating drainage patterns and control structures, paved areas and buildings, discharge outfalls, and other information.
- Estimation of the amount of impervious surface area at the terminal.
- Identification of activities with the potential to impact stormwater and the pollutants that could be present in the stormwater discharge.
- Name of receiving water.
- Identification of discharge outfalls and monitoring points

Controls

- Description of measures to minimize contact of pollutants with stormwater, the treatment and ultimate disposal of wastes other than by surface discharge.
- Description of spill prevention and response methods including notification and cleanup procedures and equipment.
- Description of the preventive maintenance program including monthly inspections during the rainfall season and a regular program of cleaning and repairing stormwater control, collection, and treatment system during the rainfall seasons.
- Description of the employee education program covering the contents of the SWPCP, ASPP and spill response, good housekeeping, and materials management procedures and practices.

- Description of record keeping and internal reporting procedures to address spills or leaks that could impact stormwater runoff and the corrective actions taken as well as the inspection and maintenance activities.

- Description of annual SWPCP and ASPP review procedures and site inspection.

- Description of discharge limitations.

2.2 Plan Objective

Portland Terminal personnel will implement the monitoring provisions of this plan to the extent practical which include the following objectives:

- Demonstrate compliance with the permits and in the implementation of the SWPCP and ASPP.

To that end, Portland Terminal personnel will conduct the following activities:

- Perform preventive maintenance and inspection activities as outlined in this plan.

- Conduct discharge monitoring activities as outlined in the plan including visual inspections and flow estimates.

- Conduct stormwater and process water management activities as outlined in the plan to prevent or minimize the contact of pollutants with the stormwater.

- Perform the discharge sampling and analysis as required by the permit conditions and as discussed in this plan.

The Portland Terminal will retain records of all monitoring information, data, and reports associated with the NPDES and industrial waste water permits for a period of five years from the date of measurement, report, or application. The Portland Terminal will amend the SWPCP and ASPP whenever there is a change in construction, operation, or maintenance that materially affects the discharge to surface water, ground waters, or the local storm drain system.

3

3.0 ORGANIZATION

3.1 Facility Information

Name
ConocoPhillips Portland Terminal

Type
Petroleum product distribution terminal and lube blending and packaging facility

Location
5528 NW Doane Avenue
Multnomah County
Portland, Oregon 97210

Name of Owner/Operator
ConocoPhillips
600 North Dairy Ashford Road
Houston, Texas 77079

3.2 Designated Person Accountable for Corporate Policy or Decision Making

Name and Title
Tom Lyons, Facility Supervisor
Gary LeFebvre, Plant Manager

Address
ConocoPhillips Portland Terminal
5528 NW Doane Avenue
Portland, OR 97210

Telephone
(503) 248-1572
(503) 248-1533

3.3 Telephone Numbers of ConocoPhillips Personnel

The following personnel are designated at the Portland Terminal and are authorized to take whatever actions are necessary. These individuals can also commit the resources required to adequately contain any spills and minimize the potential contamination of onsite stormwater runoff and nearby surface water receptors:

Bulk Handling Operations Primary Qualified Individual

Tom Lyons	Facility Supervisor
Portland Office Phone	(503) 248-1572
Cell:	(503) 849-9604

Shawn Gilfillan	**Health and Safety Coordinator**
Portland Office Phone	(503) 248-1537
Cell:	(503) 849-4439

Bill Collins	**Environmental Coordinator**
Portland Office Phone	(503) 248-1552
Cell:	(503) 849-4441

Lube Oil Operations Primary Qualified Individual

Gary LeFebvre	Plant Manager
Portland Office Phone	(503) 248-1533
Cell:	(503) 849-9812

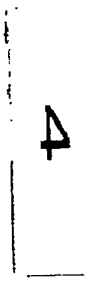
Lube Oil Operations Alternate Qualified Individual

Dave Hauck	Supervisor of Operations
Portland Office Phone	(503) 248-1542
Cell:	(503) 849-9813

3.4 Other Plans and Procedures

ConocoPhillips has prepared other plans and procedures which may require coordination with the Stormwater Pollution Control Plan and Accidental Spill Prevention Plan including:

- Local Operating Procedures
- Spill Prevention, Control, and Countermeasure (SPCC) Plan (40 CFR 112)
- Emergency Response Plan (40 CFR 112, 33 CFR 154, and OAR 340-47)
- United States Coast Guard Marine Operations Manual (33 CFR 154)



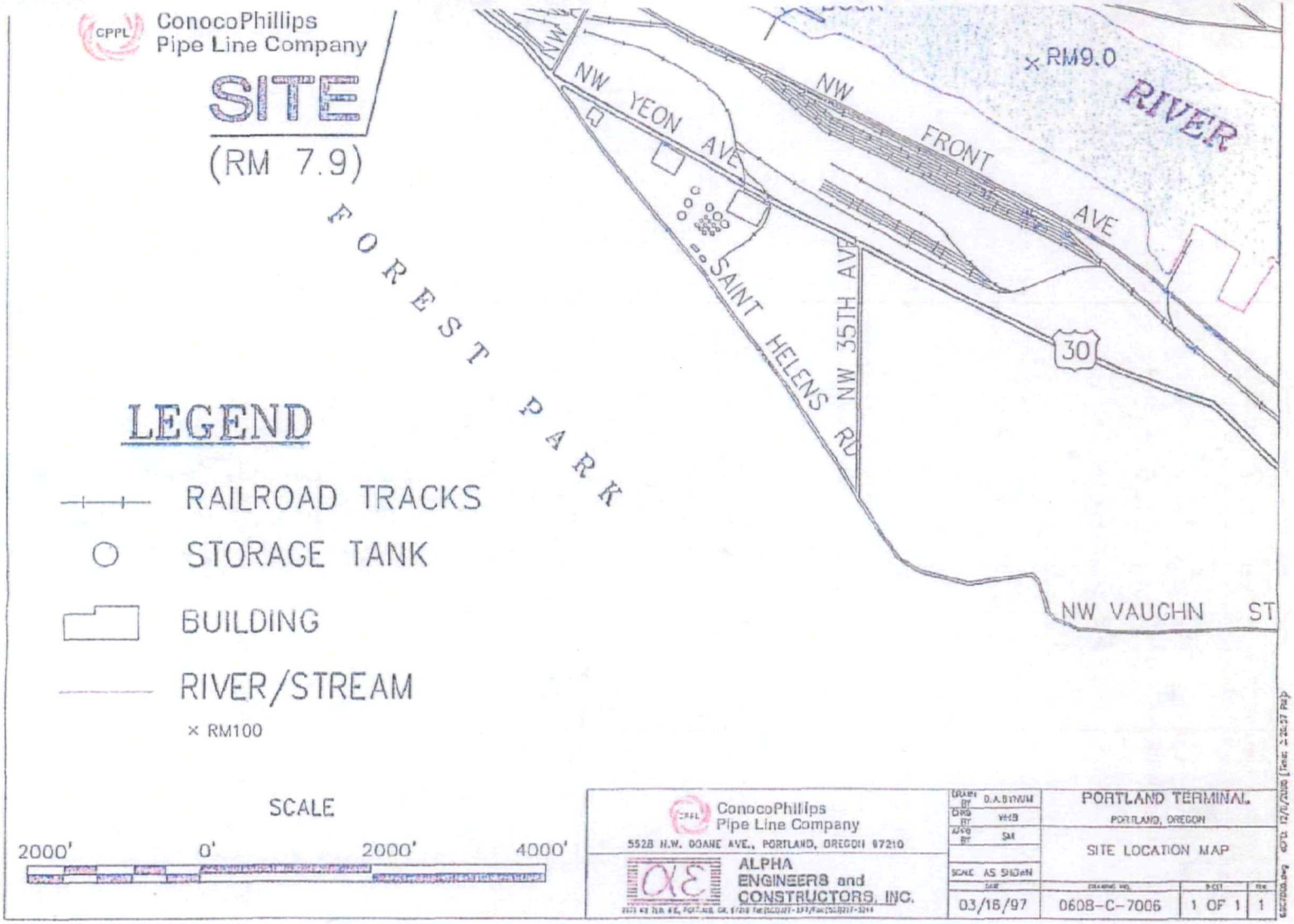
4.0 SITE DESCRIPTION

4.1 General Information

The Portland Terminal is a bulk storage and distribution facility for finished petroleum products and lubricant oils. The lubricants division also performs blending and packaging operations at the facility. The terminal is located on the northwest side of the City of Portland, on the west bank of the Willamette River and southeast of the St. John's Bridge. A general location map is contained in Figure 4-1. The major components of the terminal include product storage tanks, product transfer systems, a marine terminal, a lube blending and packaging facility, and maintenance facilities.

The main terminal area has an estimated 870,000 square feet of surface area; an estimated 30 percent (261,000 square feet) is paved or otherwise impervious to water. In addition, the terminal leases approximately 117,000 square feet of property along the Willamette River for the marine dock. Approximately 20 percent of this area is paved or otherwise impervious.

It is estimated that 75 percent of the stormwater runoff discharges to the Willamette River through two stormwater outfalls after passing through one of three oil/water separators. The remaining 25 percent is handled by the process water system where it is treated by an oil/water separator and DAF type hydrocleaner before being discharged to the City of Portland sanitary sewer system. Included in the 25 percent of stormwater handled by the process water system is runoff collected within the bermed area around the dock risers, railcar transfer station containment system, lube cells, tank truck loading and unloading racks/stations, equipment washing area, and minor quantities which are collected on pump, valve, and flange containment pads within the tank farms.



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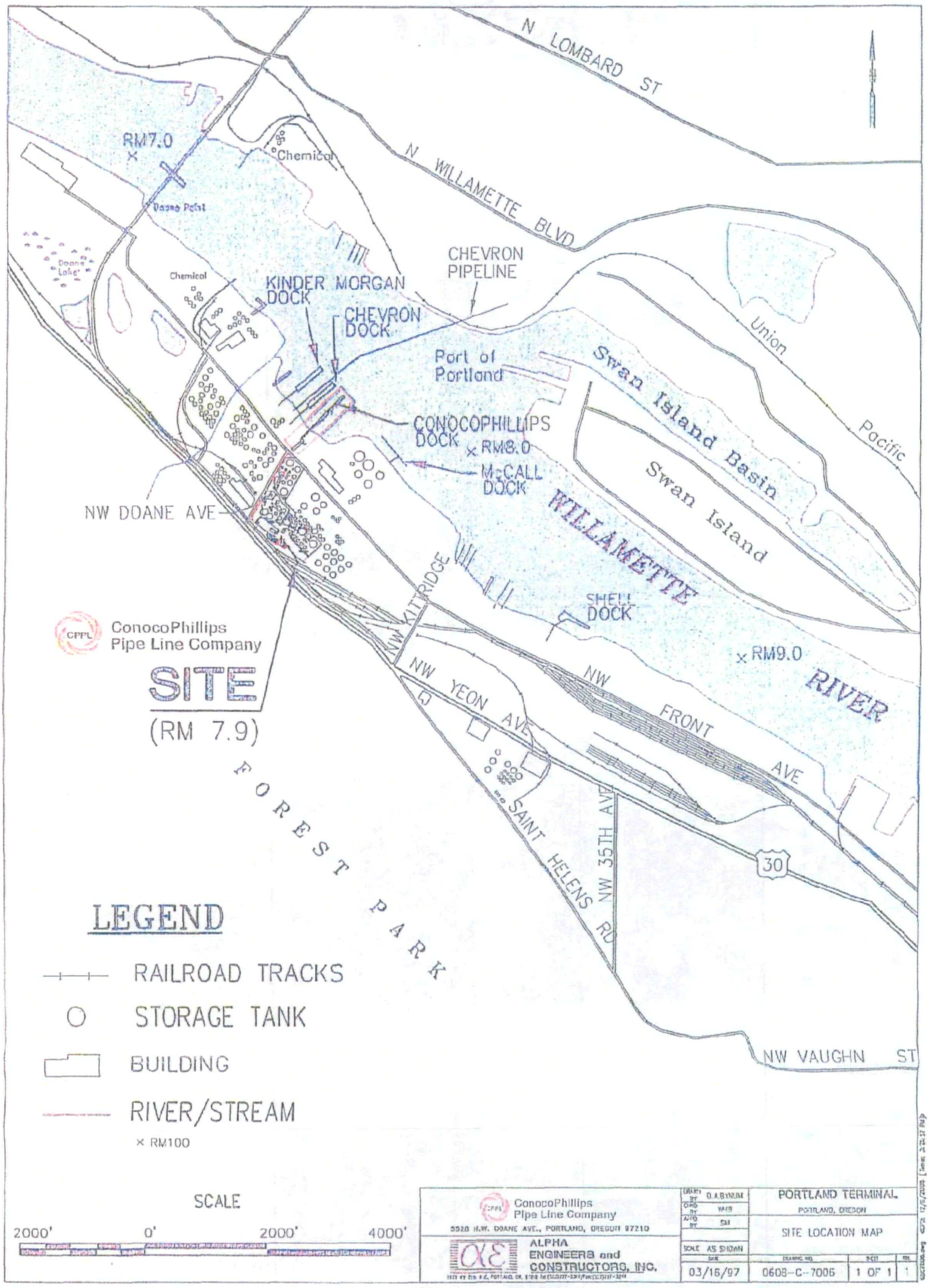
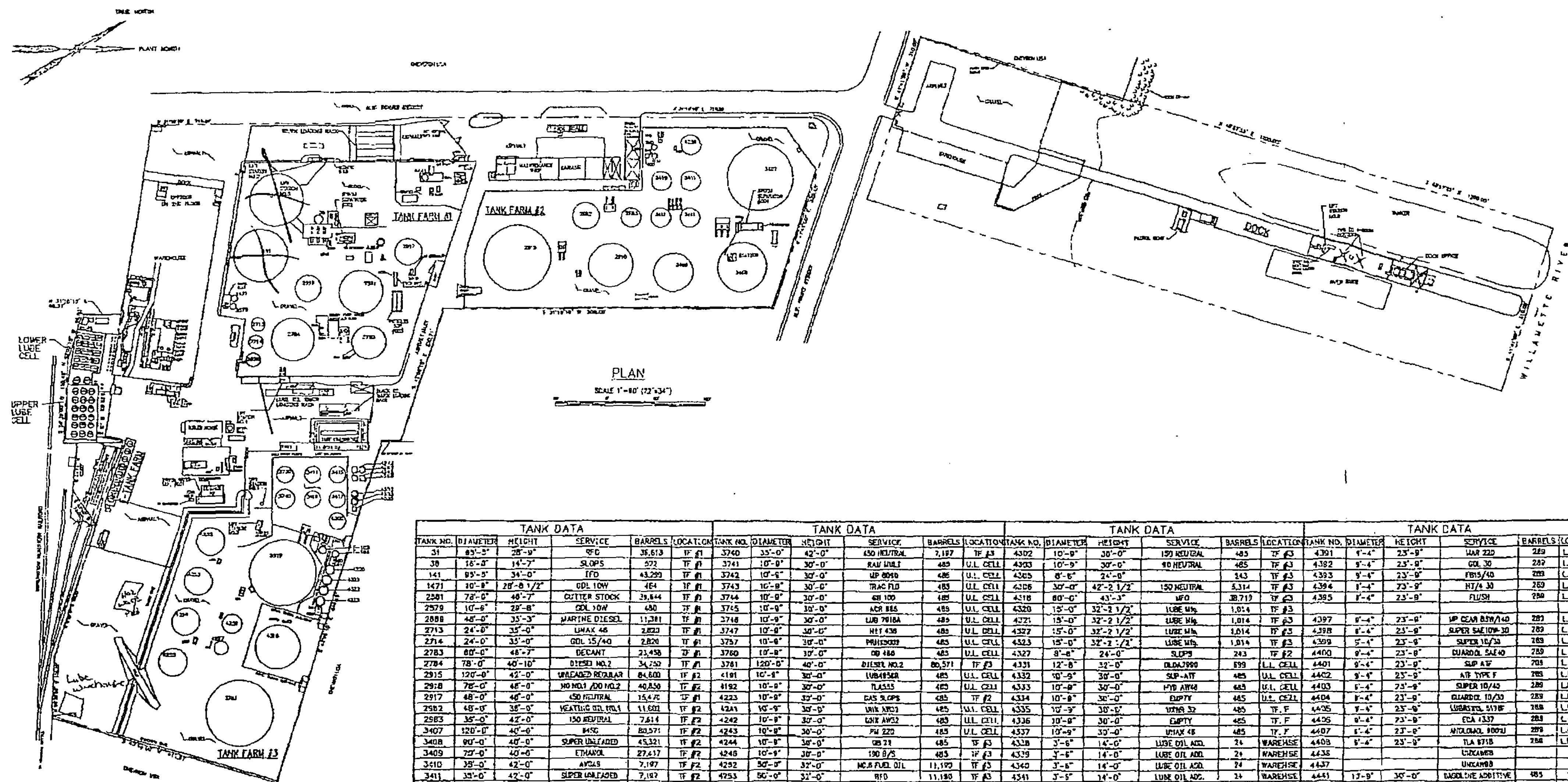

N LOMBARD ST
N WILLAMETTE BLVD
RM7.0
Chemical
Doane Point
Doane Lake
Chemical
KINDER MORGAN DOCK
CHEVRON DOCK
CHEVRON PIPELINE
Port of Portland
CONOCOPHILLIPS DOCK
RM8.0
McCALL DOCK
Union
Pacific
Swan Island Basin
Swan Island
WILLAMETTE
SHELL DOCK
RM9.0
RIVER
NW DOANE AVE
NW KITTRIDGE
NW YEON AVE
NW FRONT AVE
SAINT HELENS RD
NW 35TH AVE
30
FOREST PARK
NW VAUGHN ST
ConocoPhillips Pipe Line Company
SITE
(RM 7.9)
LEGEND
RAILROAD TRACKS
STORAGE TANK
BUILDING
RIVER/STREAM
× RM100
SCALE
2000' 0' 2000' 4000'
ConocoPhillips Pipe Line Company
5528 N.W. DOANE AVE., PORTLAND, OREGON 97210
ALPHA ENGINEERS and CONSTRUCTORS, INC.
DRAWN BY O.A.BYRUM
CHKD BY WEB
APVD BY SM
SCALE AS SHOWN
DATE 03/16/97
PORTLAND TERMINAL
PORTLAND, OREGON
SITE LOCATION MAP
DRAWING NO. 0608-C-7006
SHT 1 OF 1
REV 1



TANK NO.	DIAMETER	HEIGHT	SERVICE	BARRELS	LOCATION
31	85'-5"	28'-9"	RFO	35,613	TF #1
38	16'-0"	14'-7"	SLOPS	572	TF #1
141	85'-5"	34'-0"	IFO	43,290	TF #1
1471	10'-8"	28'-8 1/2"	GOL 10W	464	TF #1
2581	78'-0"	48'-7"	CUTTER STOCK	39,644	TF #1
2579	10'-6"	29'-8"	GOL 10W	480	TF #1
2888	48'-0"	35'-3"	MARINE DIESEL	11,381	TF #1
2713	24'-0"	35'-0"	UMAX 46	2,820	TF #1
2714	24'-0"	35'-0"	GOL 15/40	2,820	TF #1
2783	60'-0"	48'-7"	DECANT	23,458	TF #1
2784	78'-0"	40'-10"	DIESEL NO.2	34,752	TF #1
2915	120'-0"	42'-0"	UNLEADED REGULAR	84,600	TF #2
2918	78'-0"	48'-0"	HO NO.1 /DO NO.2	40,850	TF #2
2917	48'-0"	48'-0"	450 NEUTRAL	15,470	TF #1
2982	48'-0"	38'-0"	HEATING OIL NO.1	11,601	TF #2
2983	35'-0"	42'-0"	150 NEUTRAL	7,614	TF #2
3407	120'-0"	40'-0"	BASG	80,571	TF #2
3408	90'-0"	40'-0"	SUPER UNLEADED	45,321	TF #2
3409	70'-0"	40'-0"	ETHANOL	27,417	TF #2
3410	35'-0"	42'-0"	AVGAS	7,197	TF #2
3411	35'-0"	42'-0"	SUPER UNLEADED	7,197	TF #2
3412	35'-0"	42'-0"	HEATING OIL NO.1	7,197	TF #2
3413	35'-0"	42'-0"	BASG	7,197	TF #2
3414	30'-0"	42'-0"	100 B/S	5,288	TF #3
3415	30'-0"	42'-0"	90 NEUTRAL	5,288	TF #3
3416	30'-0"	42'-0"	150 NEUTRAL	5,288	TF #3
3417	30'-0"	42'-0"	90 NEUTRAL	5,288	TF #3
3579	120'-0"	40'-0"	MFO	80,371	TF #3
3639	25'-0"	38'-0"	GOL 30	3,147	TF #1
3823	10'-9"	30'-0"	SLOPS	485	TF #2
3739	33'-0"	42'-0"	190 B/S	5,288	TF #3

TANK NO.	DIAMETER	HEIGHT	SERVICE	BARRELS	LOCATION
3740	35'-0"	42'-0"	450 NEUTRAL	7,197	TF #3
3741	10'-9"	30'-0"	RAU MULT	485	U.L. CELL
3742	10'-9"	30'-0"	UP 8090	485	U.L. CELL
3743	10'-9"	30'-0"	TRAC FLD	485	U.L. CELL
3744	10'-9"	30'-0"	GB 100	485	U.L. CELL
3745	10'-9"	30'-0"	ACR 885	485	U.L. CELL
3746	10'-9"	30'-0"	LUB 7918A	485	U.L. CELL
3747	10'-9"	30'-0"	HIT 438	485	U.L. CELL
3757	10'-9"	30'-0"	PHU13009	485	U.L. CELL
3760	10'-9"	30'-0"	DB 486	485	U.L. CELL
3781	120'-0"	40'-0"	DIESEL NO.2	80,571	TF #3
4191	10'-9"	30'-0"	LUB4958R	485	U.L. CELL
4192	10'-9"	30'-0"	TLA555	485	U.L. CELL
4223	10'-9"	30'-0"	GAS SLOPS	485	TF #2
4241	10'-9"	30'-0"	UNX AW32	485	U.L. CELL
4242	10'-9"	30'-0"	UNX AW32	485	U.L. CELL
4243	10'-9"	30'-0"	PM 220	485	U.L. CELL
4244	10'-9"	30'-0"	GB 21	485	TF #3
4246	10'-9"	30'-0"	190 B/S	485	TF #3
4252	50'-0"	32'-0"	NO.6 FUEL OIL	11,190	TF #3
4253	50'-0"	32'-0"	RFO	11,180	TF #3
4254	50'-0"	32'-0"	PS-300	11,190	TF #3
4255	50'-0"	32'-0"	O.O.S.	11,100	TF #3
4256	35'-0"	32'-0"		5,483	TF #3
4257	25'-0"	16'-0"	O.O.S.	1,399	TF #3
4258	10'-9"	30'-0"		485	TF #3
4259	35'-0"	32'-0"	TRANSMIX	5,483	TF #2
4268	10'-9"	30'-0"	FLUSH	485	TF #3
4281	10'-9"	30'-0"	ATF MP	485	U.L. CELL
4300	12'-6"	32'-0"	RAU MULT	803	L.L. CELL

TANK NO.	DIAMETER	HEIGHT	SERVICE	BARRELS	LOCATION
4302	10'-9"	30'-0"	150 NEUTRAL	485	TF #3
4303	10'-9"	30'-0"	90 NEUTRAL	485	TF #3
4305	8'-6"	24'-0"		243	TF #3
4306	30'-0"	42'-2 1/2"	150 NEUTRAL	5,314	TF #3
4318	80'-0"	43'-3"	MFO	38,719	TF #3
4320	15'-0"	32'-2 1/2"	LUBE Mfg.	1,014	TF #3
4321	15'-0"	32'-2 1/2"	LUBE Mfg.	1,014	TF #3
4322	15'-0"	32'-2 1/2"	LUBE Mfg.	1,014	TF #3
4323	15'-0"	32'-2 1/2"	LUBE Mfg.	1,014	TF #3
4327	8'-6"	24'-0"	SLOPS	243	TF #2
4331	12'-8"	32'-0"	OLOA7990	699	L.L. CELL
4332	10'-9"	30'-0"	SUP-ATF	485	U.L. CELL
4333	10'-9"	30'-0"	HYD AW46	485	U.L. CELL
4334	10'-9"	30'-0"	EMPTY	485	U.L. CELL
4335	10'-9"	30'-0"	UMAX 32	485	TF. F
4336	10'-9"	30'-0"	EMPTY	485	TF. F
4337	10'-9"	30'-0"	UMAX 46	485	TF. F
4338	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4339	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4340	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4341	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4342	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4343	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4344	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4345	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4346	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4347	3'-6"	14'-0"	LUBE OIL ADD.	24	WAREHSE
4369	10'-6"	30'-0"	450 N	485	TF #3
4388	9'-4"	23'-9"	FLUSH	289	L.L. CELL
4389	9'-4"	23'-9"	UNICOE48	289	L.L. CELL
4390	9'-4"	23'-9"	EAC 150	289	L.L. CELL

TANK NO.	DIAMETER	HEIGHT	SERVICE	BARRELS	LOCATION
4391	9'-4"	23'-9"	UAR 220	289	L.L. CELL
4392	9'-4"	23'-9"	GOL 30	289	L.L. CELL
4393	9'-4"	23'-9"	FB15/40	289	L.L. CELL
4394	9'-4"	23'-9"	HT/4 30	289	L.L. CELL
4395	9'-4"	23'-9"	FLUSH	289	L.L. CELL
4397	9'-4"	23'-9"	UP GEAR 85W/140	289	L.L. CELL
4398	9'-4"	23'-9"	SUPER SAE10W-30	289	L.L. CELL
4399	9'-4"	23'-9"	SUPER 10/30	289	L.L. CELL
4400	9'-4"	23'-9"	GUARDOL SAE40	289	L.L. CELL
4401	9'-4"	23'-9"	SUP ATF	289	L.L. CELL
4402	9'-4"	23'-9"	ATF TYPE F	289	L.L. CELL
4403	9'-4"	23'-9"	SUPER 10/40	289	L.L. CELL
4404	9'-4"	23'-9"	GUARDOL 10/30	289	L.L. CELL
4405	9'-4"	23'-9"	LUBRIZOL 5178F	289	L.L. CELL
4406	9'-4"	23'-9"	ECA 1337	289	L.L. CELL
4407	9'-4"	23'-9"	ANGLOMOL 9001U	289	L.L. CELL
4408	9'-4"	23'-9"	TLA 8718	289	L.L. CELL
4436			UNXAM88		
4437			UNXAM88		
4441	13'-9"	30'-0"	GASOLINE ADDITIVE	485	TF #2
F-103	12'-8"	32'-0"	EXXON 100	830	TF. F
F-104	10'-9"	32'-0"	EVCRN 100	571	TF. F
F-10			EMPTY		TF. F
F-11			EMPTY		TF. F
F-12			TURMCC608		TF. F
F-13					
F-14			FLUSH		

DRAWING NO.	REFERENCE DRAWINGS	REV. NO.	DATE	REVISED	DRAWN BY	CKD. BY
		A	02/12/98	UPDATED FOR SWPCP	DAB	SM
		B	3/10/03	REVISE BARRELS ON TANK DATA AND LOGO	OKB	WHB

ConocoPhillips
5528 N.W. DOANE AVE., PORTLAND, OREGON 97210

ALPHA ENGINEERS and CONSTRUCTORS, INC.

DRAWN BY D.A.DYNUM
CHKD BY MK
APPD BY KJP
SCALE AS SHOWN

PORTLAND TERMINAL
PORTLAND, OREGON

SITE PLAN

DATE	DRAWING NO.	SHEET	REV
02/12/98	0608-C-1000	1 OF 1	B

0608C1000.dwg <CPS: 03/10/03 [TIME: 12:45 AM] >

4.2 Site Facilities

The primary Portland Terminal facilities include:

- (6) tank farms storing refined products, black oil, reprocessed fuel oil (RFO), lube oils, and additives
- (9) transfer facilities including truck loading and unloading racks/stations, railcar loading/unloading station, and marine vessel loading/unloading dock
- Lube oil blending and packaging area
- Office and warehouse buildings
- Hazardous waste storage area
- Maintenance garage
- Stormwater collection and treatment system
- Process water collection and treatment system

The majority of the refined products are received by pipeline with the balance received by marine vessel. Other products are received by marine vessel, truck, or railcar. The Olympic Pipe Line Company owns and operates two 12-inch pipelines which supply the majority of gasoline, diesel, and heating oil to the terminal. Similarly, two 10-inch inter-company pipelines, running between the Kinder Morgan, Chevron and ConocoPhillips terminals, supply additional petroleum distillates and gasoline to the facility. Gasoline, #2 diesel, #1 diesel, black oil, cutter stock, lube oil base stocks, and other refined products are also received by barge and tanker. Lube oil base stocks are received by rail car, as are lube oil additives and ethanol.

Shipments of gasoline, #2 diesel, #1 diesel, and blended lube oils from the terminal are conducted primarily by tank truck at the loading racks; however, a significant portion is also loaded onto barges. Gasoline and distillates are also shipped from the terminal through an 8-inch pipeline that is owned and operated by Kinder-Morgan terminal or through the two 10-inch inter-company pipelines mentioned above. Black oil is primarily loaded into barges but also into tank trucks. Lube oils are shipped by tank truck and railcar.

4.2.1 Storage Tanks

The terminal's petroleum product storage consists of 119 above ground storage tanks, 90 of which store lubricants and 29 which store light oil. The storage tanks are situated in six tank farms; three of which are refined product/additive and three which are lube oil tank farms. Tanks are of welded and riveted steel construction and contain different grades of gasoline, #2 diesel, #1 diesel, black oil, lube oil and lube blend/base stocks, RFO, additives, ethanol, slops and transmix. The total capacity of the tanks is approximately 731,500 barrels (30,723,000 gallons) with the capacity of the largest tank being 80,269 barrels (3,371,298 gallons). A list of these tanks is shown below in table 4-1.

TABLE 4-3
ConocoPhillips Portland Terminal
Above Ground Storage Tanks and Contents

Tank Number	Product Stored	Diameter	Height	Type of Construction	Safe Fill Capacity (gal)	Year of Construction
Tank Farm 1						
36	Slop Oil	14'-6"	16'	Riveted Steel	20,496	1907
1471	Hydraulic Tractor Fluid	10'-9"	28'-8½"	Riveted Steel	17,300	1921
2561	Marine Fuel Oil	78'-0"	46'-7"	Riveted Steel	1,569,582	1929
2579	Hydraulic Tractor Fluid	10'-9"	29'-8"	Welded Steel	18,000	1929
2669	Marine Diesel	48'-0"	35'-3"	Riveted Steel	449,694	1931
2713	Unax AW 46	24'-0"	35'-0"	Welded Steel	109,000	1937
2714	Guardol 15W/40	24'-0"	35'-0"	Welded Steel	109,000	1937
2783	Decant Oil	60'-0"	46'-7"	Riveted Steel	948,066	1937
2784	Diesel #2	78'-0"	40'-10"	Riveted Steel	1,439,130	1937
2917	RLOP 220 N	48'-0"	48'-0"	Welded Steel	612,000	1938
3623	HiTec 6576	10'-9"	30'-0"	Welded Steel	18,228	1950
3639	SUP SYN BL 5W/30	25'-0"	36'-0"	Welded Steel	120,000	1951
4369	RLOP 220N	10'-9"	30'-0"	Welded Steel	17,500	1979
4441	Octel 9056	10'-9"	30'-0"	Welded Steel	18,648	1993
Tank Farm 2						
2915*	Unleaded Gasoline	120'-0"	42'-0"	Welded Steel	3,262,056	1938
2916	Diesel #2	78'-0"	48'-0"	Welded Steel	1,652,196	1938
2982	Diesel #1	48'-0"	36'-0"	Welded Steel	416,262	1941
2983	RLOP 220 N	36'-0"	42'-0"	Welded Steel	304,000	1941
3407	Unleaded Gasoline	120'-0"	40'-0"	Welded Steel	2,955,540	1949
3408*	Unleaded Gasoline	90'-0"	40'-0"	Welded Steel	1,639,680	1949
3409	Unleaded Gasoline	70'-0"	40'-0"	Welded Steel	948,654	1949
3410	Ethanol	35'-0"	42'-0"	Welded Steel	278,964	1949
3411	Unleaded Gasoline	35'-0"	42'-0"	Welded Steel	259,350	1949
3412	~~Diesel #1~~ Ethanol	35'-0"	42'-0"	Welded Steel	279,426	1949
3413	Unleaded Gasoline	35'-0"	42'-0"	Welded Steel	259,560	1949
4223	Slop Oil	10'-9"	30'-0"	Welded Steel	18,690	1968
4259	Transmix	35'-0"	32'-0"	Welded Steel	205,506	1968
4327	Gasoline Slops	8'-6"	24'-0"	Welded Steel	10,080	1974

Tank Farm 3						
3414	RLOP 220 N	30'-0"	42'-0"	Welded Steel	200,000	1949
3415	SUN 525	30'-0"	42'-0"	Welded Steel	200,000	1949
3416	RLOP 100N	30'-0"	42'-0"	Welded Steel	200,000	1949
3417	ULTRA S-4	30'-0"	42'-0"	Welded Steel	200,000	1949
3579	Industrial Fuel Oil	120'-0"	40'-0"	Welded Steel	3,307,668	1950
3739	SUN 150 B/S	30'-0"	42'-0"	Welded Steel	200,000	1954
3740	RLOP 600 N	35'-0"	42'-0"	Welded Steel	277,000	1954
3761	Diesel #2	120'-0"	40'-0"	Welded Steel	3,240,342	1954
4244	Mohawk 450	10'-9"	30'-0"	Welded Steel	17,500	1968
4245	SUN 525	10'-9"	30'-0"	Welded Steel	17,500	1968
4252	Residual Fuel Oil	50'-0"	32'-0"	Welded Steel	458,640	1968
4253	Residual Fuel Oil	50'-0"	32'-0"	Welded Steel	451,290	1968
4254	PS 300	50'-0"	32'-0"	Welded Steel	459,312	1968
4255	Bio Diesel	50'-0"	32'-0"	Welded Steel	404,250	1968
4256	Out of Service	35'-0"	32'-0"	Welded Steel	195,408	1968
4257	Out of Service	25'-0"	16'-0"	Welded Steel	38,367	1968
4258	Line Clippings	10'-9"	30'-0"	Welded Steel	18,000	1968
4266	Flush	10'-9"	30'-0"	Welded Steel	17,500	1968
4302	RLOP 600N	10'-9"	30'-0"	Welded Steel	17,500	1971
4303	RLOP 100N	10'-9"	30'-0"	Welded Steel	17,500	1971
4305	Out of Service	8'-6"	24'-0"	Welded Steel	8,900	1971
4306	RLOP 100N	30'-0"	42'-2½"	Welded Steel	200,000	1971
4318	Diesel #2	80'-0"	43'-3"	Welded Steel	1,422,456	1973
4320	Sup Syn BL 10W/30	15'-0"	32'-2½"	Welded Steel	35,000	1973
4321	Uniguide II 100	15'-0"	32'-2½"	Welded Steel	35,000	1973
4322	T5X HD 15W/40	15'-0"	32'-2½"	Welded Steel	35,000	1973
4323	Super ATF	15'-0"	32'-2½"	Welded Steel	35,000	1973
F103	UTRA 58	12'-6"	32'-0"	Welded Steel	25,500	1973
F104	UTRA 58	10'-9"	32'-0"	Welded Steel	17,500	1973
F-Tank Farm						
4335	Utility	10'-9"	30'-0"	Welded Steel	17,500	1973
4336	Utility	10'-9"	30'-0"	Welded Steel	17,500	1973
4337	Utility	10'-9"	30'-0"	Welded Steel	17,500	1973
4436	Unax AW 32	10'-9"	30'-0"	Welded Steel	17,500	1990
4437	Unax AW WR 32	10'-9"	30'-0"	Welded Steel	17,500	1990
F10	Utility	10'-9"	10'-0"	Welded Steel	5,200	1954
F11	Utility	10'-9"	10'-0"	Welded Steel	5,200	1954
F12	Utility	10'-9"	10'-0"	Welded Steel	5,200	1954

Upper Lube Cell						
3741	Ramar CLF 17E	10'-9"	30'-0"	Welded Steel	17,500	1954
3742	MP Gear Lube 80/90	10'-9"	30'-0"	Welded Steel	17,500	1954
3743	Utility	10'-9"	30'-0"	Welded Steel	18,600	1954
3744	HYNAP N100	10'-9"	30'-0"	Welded Steel	17,500	1954
3745	HITEC 5751	10'-9"	30'-0"	Welded Steel	17,500	1954
3746	Lubrizol 4998C	10'-9"	30'-0"	Welded Steel	17,500	1954
3747	Lubrizol 4990CH	10'-9"	30'-0"	Welded Steel	17,500	1954
3757	HITEC 1193	10'-9"	30'-0"	Welded Steel	17,500	1954
3760	Raffene 750L	10'-9"	30'-0"	Welded Steel	17,500	1954
4191	Lubrizol 48254	10'-9"	30'-0"	Welded Steel	17,500	1964
4192	Lubrizol 7075F	10'-9"	30'-0"	Welded Steel	17,500	1964
4241	UNAX AW 68	10'-9"	30'-0"	Welded Steel	17,500	1968
4242	UNAX AW 68	10'-9"	30'-0"	Welded Steel	17,500	1968
4243	HT4/10W	10'-9"	30'-0"	Welded Steel	17,500	1968
4281	Versa Tran ATF	10'-9"	30'-0"	Welded Steel	17,500	1969
4332	Super ATF	10'-9"	30'-0"	Welded Steel	17,500	1973
4333	Point Premier 10W/30	10'-9"	30'-0"	Welded Steel	17,500	1973
4334	Super 5W/20	10'-9"	30'-0"	Welded Steel	17,500	1973
Lower Lube Cell						
4300	Ramar CLF 17E	12'-6"	32'-0"	Welded Steel	25,500	1969
4331	Ethyl HITEC 6886E	12'-6"	32'-0"	Welded Steel	25,500	1973
4388	Utility	9'-4"	23'-9"	Welded Steel	13,500	1984
4389	Utility	9'-4"	23'-9"	Welded Steel	13,500	1984
4390	Bar & Chain 150	9'-4"	23'-9"	Welded Steel	13,500	1985
4391	Utility	9'-4"	23'-9"	Welded Steel	13,500	1985
4392	Utility	9'-4"	23'-9"	Welded Steel	13,500	1985
4393	Utility	9'-4"	23'-9"	Welded Steel	13,500	1985
4394	Utility	9'-4"	23'-9"	Welded Steel	13,500	1985
4395	Utility	9'-4"	23'-9"	Welded Steel	13,500	1985
4397	Lubrizol 9692A	9'-4"	23'-9"	Welded Steel	13,500	1985
4398	HITEC 1193A	9'-4"	23'-9"	Welded Steel	13,500	1985
4399	Firebird 15W/40	9'-4"	23'-9"	Welded Steel	13,500	1985
4400	Guardol 30	9'-4"	23'-9"	Welded Steel	13,500	1985
4401	Mohawk 150	9'-4"	23'-9"	Welded Steel	13,500	1985
4402	TSX HD10	9'-4"	23'-9"	Welded Steel	13,500	1985
4403	HT4/30W	9'-4"	23'-9"	Welded Steel	13,500	1985
4404	Fleet Sup EC 15W/40	9'-4"	23'-9"	Welded Steel	13,500	1985
4405	HITEC 3472	9'-4"	23'-9"	Welded Steel	13,500	1987
4406	Lubrizol 9990A	9'-4"	23'-9"	Welded Steel	13,500	1987
4407	Ethyl HITEC 388	9'-4"	23'-9"	Welded Steel	13,500	1987
4408	Ethyl HITEC 5756	9'-4"	23'-9"	Welded Steel	13,500	1987

Lube Blending Warehouse						
4338	Conoco AN 801	3'-6"	14'-0"	Welded Steel	1000	1974
4339	Ethyl HITEC 534	3'-6"	14'-0"	Welded Steel	1000	1974
4340	Ethyl HITEC 385	3'-6"	14'-0"	Welded Steel	1000	1974
4341	Utility	3'-6"	14'-0"	Welded Steel	1000	1974
4342	HITEC 008	3'-6"	14'-0"	Welded Steel	1000	1974
4343	Viscoplex 1-302	3'-6"	14'-0"	Welded Steel	1000	1974
4344	Oleic Acid/Emersol 213	3'-6"	14'-0"	Welded Steel	1000	1974
4345	Lubrizol 8790	3'-6"	14'-0"	Welded Steel	1000	1974
4346	Utility	3'-6"	14'-0"	Welded Steel	1000	1974
4347	Utility	3'-6"	14'-0"	Welded Steel	1000	1974
F-14	Flush - Under Lab	5'-3"	30'-0"	Welded Steel	5000	1981
F-8	Utility			Welded Steel	1000	1968
F-9	Line Clippings			Welded Steel	2200	1954
F-13	Slops - Under Lab	5'-3"	30'-0"	Welded Steel	5000	1981

The Terminal also has two underground storage tanks (USTs). Several other UST's were removed from the terminal in 1997. A summary of the remaining UST's are provided below:

Tank	Product	Capacity	Location
6	Flush Oil	5,000 gal	Under Lubes Laboratory
7	Slop Oil	5,000 gal	Under Lubes Laboratory

General descriptions of the six tank farms, their tanks, and drainage/spill containment systems are provided in the following sections.

Tank Farm 1

Tank Farm 1 is located adjacent to Doane Avenue between the Refined Products Loading Rack and the Main Office/Warehouse Building. The tank farm contains 14 storage tanks of various sizes; the contents range from industrial and reprocessed fuel oils (RFO), diesel, cutter stock, lube oils, slop oils, gasoline additives, and black (decant) oil. Both the stormwater oil/water Separator #002 and the process water oil/water Separator #003 and hydrocleaner are situated in Tank Farm 1. The tank farm also contains the facility's vapor recovery system for processing vapors from the refined products loading rack.

Tank Farm 2

Tank Farm 2 is located at the corner of Doane Avenue and Front Street and contains 16 tanks of various sizes; the contents are primarily gasoline but diesel, #1 diesel, transmix, ethanol, lube oil,

slops, and additives are also stored here. The stormwater oil/water Separator #004 is situated within the tank farm.

Tank Farm 3

Tank Farm 3 is located at the southeast end of the terminal and contains 25 tanks of various sizes; the contents consist primarily of lube oils in addition to diesel, marine fuel oil, RFO, black oil, flush oil, and a few empty tanks. Tanks containing heavier oils are insulated and heated to prevent the oil from solidifying or becoming too viscous to pump. The stormwater oil/water Separator #001 is situated just outside the southwest corner of the tank farm.

Lower and Upper Lube Cells (Tank Farms 4 and 5)

The Lower and Upper Lube Cells (Tank Farms 4 and 5) are adjoining and located next to the southwest corner of the Main Office/Warehouse Building. The lube cells contain a total of 40 small lube oil base stock, additive, and finished product storage tanks and their associated pumps and interconnecting above ground piping.

F-Tank Farm (Tank Farm 6)

The F-Tank Farm (Tank Farm 6) is located between Tank Farm 3 and the lube cells. It consists of eight relatively small tanks containing lube oil base stocks and additives and their associated pumps and above ground piping.

4.2.2 Transfer Facilities

The Portland Terminal contains the following transfer facilities:

- Refined Product Loading Rack
- Lube Oil Tank Truck Loading Rack
- Black Oil Tank Truck Loading Rack
- Lube Oil/RFO Tank Truck Unloading Station
- Lube Oil Additive Unloading Station
- Railcar Loading/Unloading Rack (lubes, additives, black oil)
- Tank Truck Unloading Station (all products)
- Gasoline Additive Unloading Station
- Vessel Loading/Unloading and Tug Fueling Station

General Descriptions of the transfer facilities are provided in the following sections:

Gasoline and Distillate Truck Loading Rack

The Refined Product Loading Rack has three lanes for filling tank trucks. It is situated on the west side of the terminal adjacent to Tank Farm 1. Each lane is supplied with either gasoline, #2 diesel, or #1 diesel primarily from Tank Farm 2; however, selected tanks in Tank Farms 1 and 3 also supply #2 diesel. The storage tanks are connected to the rack by above and below ground piping within the diked tank farms and by below ground piping between the tank farms and the loading rack. Transfers to the tank trucks are conducted entirely within the loading rack containment area. The loading rack utilizes bottom loading equipment only and is equipped with a phase I vapor recovery system.

Lube Oil Tank Truck Loading Rack

The Lube Oil Loading Rack is situated on the southeast side of Tank Farm 1 and consists of only one lane or station. The rack is supplied with lube oil from the Tank Farms 1, 3, and/or the lube cells through above ground piping. This loading rack is fitted with top loading equipment; oil transfers are monitored by weight instead of volume via a certified truck scale beneath the rack.

Black Oil/RFO Tank Truck Loading Rack

The Black Oil/RFO Loading Rack is located adjacent to the lube oil loading rack and has two loading lanes, one on either side. The rack is supplied with black oil and RFO from Tank Farm 3 through piping situated in a below grade pipe trench. The rack is fitted with top loading equipment; oil transfers are monitored by weight rather than by volume by weighing the truck before and after the transfer.

Lube Oil/RFO Tank Truck Unloading Station

The primary Lube Oil/RFO Unloading Station is located on the west side of Tank Farm 3 adjacent to the Black Oil Loading Rack and consists of only one lane or station. The lube oil, lube oil additives, or RFO are unloaded from tank trucks through flexible hoses via gravity flow to manifolds adjacent to the station and then pumped to the appropriate tank. A second RFO Unloading Station is located at the northeast end of the Lube Oil Loading Rack where tank trucks are unloaded in the same manner as described above. Diesel can also be unloaded from trucks at this station.

Lube Oil Additive Unloading Station

The Lube Oil Additive Unloading Station consists of a paved area along the east side of the F-Tank Farm. Additives are unloaded via gravity flow from tank trucks through flexible hoses connected to pump manifolds at the base of each tank; the additives are then pumped into the tanks.

Railcar Loading/Unloading Rack

Railcar unloading of lube oil additives, black oil, and lube oil base stocks and the loading of finished lube oils are conducted at the Railcar Loading/Unloading Rack adjacent to the F-Tank Farm and southeast of the lube cells. The rack can accommodate up to four railcars with two stations on either side of the rack. The railcars are unloaded using flexible hoses attached to the bottom of the cars and top-loaded through pivoting arms and flexible hoses.

Tank Truck Unloading Station

The Tank Truck Unloading Station is located at the northeast end of the maintenance garage and consists of two dished concrete slabs adjacent to the product manifolds and pumps. Refined products and ethanol are unloaded via gravity flow from the trucks through flexible hoses to one or more of the various hose connections. The material is then pumped through a series of pipelines to the appropriate tank.

Refined Products Additive Unloading Station

The Refined Products Additive Unloading Station consists of the paved area along the east side of Tank Farm 1, directly north of the Refined Product Loading Rack. Additives are unloaded from tank trucks through flexible hoses connected to a pipeline adjacent to the station and then pumped to Tank 4441 and Tank 3623, in Tank Farm 1.

Vessel Loading/Unloading and Tug Fueling Stations

The Portland Terminal dock is located on the Willamette River just northeast of Tank Farm 2 across Front Street and is equipped with Vessel Loading/Unloading and Tug Fueling Stations. The vessel station is located near the center of the dock and is used to load and unload gasoline, diesel, heating oil, black oil, and lube oil. Vessels calling at the dock are primarily barges although transfers from tankers and ships are occasionally conducted. The Tug Fueling Station is located near the end of the dock and is used to fuel tugs with diesel and to supply tugs with lube oils.

All transfers are conducted using flexible cargo hoses between the vessels and the piping risers at the loading/unloading station. The risers are connected to the storage tanks within the tank farms through a combination of above and below ground piping. Flexible hoses on reels with dispenser nozzles are used to transfer diesel and lube oil at the fueling station. Transfers to the terminal are conducted using pumps on board the tanker or barge whereas transfers to barges are conducted using pumps at the terminal.

4.2.3 Hazardous Waste Storage Area

The Hazardous Waste Storage Area is located north of the boiler room and outside the southwest corner of Tank Farm 3. The storage facility is primarily used to store drums of non-hazardous and hazardous waste prior to shipment to an approved disposal facility.

4.2.4 Lube Blending/Packaging Area and Warehouse

The Lube Oil Blending/Packaging Area and Warehouse is situated on the first floor of the Main Office/Warehouse Building. The east end of the warehouse contains a blending facility with a multitude of piping and pumps used to blend various lube oil base stocks and additives to produce finished lube products. The blending area also contains 10 small tanks used to store lube oil additives and some base stocks. The finished products are stored in above ground tanks in the lube cells or F-Tank Farm. These finished products are either shipped in bulk or pumped back into the warehouse to the packaging area where they are placed in drums, totes, or pails. Packaged lube products are temporarily stored in other parts of the warehouse prior to being shipped off-site.

4.2.5 Maintenance Garage

The Maintenance Garage is situated along Doane Avenue adjacent to Tank Farm 2 and is used to conduct maintenance work on the terminal's miscellaneous equipment. Insignificant quantities of virgin and used lubricating oils, antifreeze, etc., are stored at the garage in association with the normal maintenance and repair operations. The used oil and antifreeze are stored in drums and periodically transported to approved recycling facilities. Standard precautions are taken to prevent these liquids from spilling and escaping their immediate storage areas. The garage area is equipped with several catch basins that are connected to the terminal's process water system; there are no stormwater catch basins in the vicinity.

Due to the small quantities of materials stored, the relatively remote location, and the local drainage being routed to the process water system, there is little or no potential for these materials to enter the stormwater system and be discharged to the Willamette River. Therefore, these materials will not be considered further in this plan and no monitoring for the associated contaminants in the terminal's stormwater discharge will be conducted.

4.2.6 Office and Warehouse Buildings

Buildings at the Portland Terminal consist of:

- Main Office/Warehouse
- Boiler House
- Asphalt Shed (dock warehouse)
- Dock Office
- Office Trailers
- Warehouse Annex

Main Office/Warehouse

The Main Office/Warehouse is located at the southeast corner of the terminal. The office is situated above the Lube Warehouse described above. No petroleum products are stored in the office area. The roof drains from this building discharge collected stormwater to an underground pipe that runs down the adjacent alley; in turn, the water is discharged directly to the municipal storm drain along Doane Avenue.

Boiler House

The Boiler House contains the boilers that provide steam to the terminal and houses the product quality room for the light oil terminal. The boiler room is situated on a sloped concrete pad which drains to a process system catch basin. Water treatment chemicals and very small quantities of cleaners and solvents are stored in the boiler room. The drums of water treatment chemicals are situated inside secondary containment drums, when in use, to minimize the potential for spills and migration to the process water system. Due to the minimal potential for these chemicals to reach the stormwater system, they will not be considered further in this plan.

Asphalt Shed

The Asphalt Shed is located along Front Street and is adjacent to the dock; it is used to store supplies, equipment, and excess furniture. A portion of the shed is also used to conduct welding or minor equipment repair operations. The shed is equipped with a concrete slab floor but no floor drains. Roof drains discharge to the ground surrounding the shed. No petroleum products or other potential contaminants in quantities that would be classified as significant are stored there. Because the Asphalt Shed is not a potential source of stormwater contamination, it will not be considered further in this plan.

Dock Office/Office Trailer

The Dock Office and two Office Trailers are small buildings and are not used to store petroleum products or hazardous materials. The Dock Office is situated on the dock between the Vessel Loading/Unloading and the Tug Fueling Stations; the Office Trailer is located in the main terminal area adjacent to the Lube Warehouse. Roof drains from the Office Trailer discharge to the ground surrounding the trailer, whereas stormwater from the Dock Office roof drains directly to the Willamette River. Because the Dock Office/Office Trailer are not potential sources of stormwater contamination, they will not be considered further in this plan.

Warehouse Annex

The Warehouse Annex is located at the east end of the terminal. Finished lube oil products are stored in this area as are miscellaneous package raw materials such as empty buckets and bottle caps. Materials are temporarily stored in this warehouse prior to being shipped off-site or in the case of the raw materials used in the production process.

4.2.7 Stormwater System

The stormwater collection and treatment system, at the terminal, consists of a network of catch basins, lift stations, underground piping, valves, and separators designed to collect and treat stormwater. Treated stormwater is discharged to the municipal storm drain system and the Willamette River under the terminal's NPDES stormwater discharge permit. Most of the system operates under gravity flow although there are lift stations, where required, for transferring stormwater to the oil/water separators.

The stormwater catch basins are located throughout the terminal, particularly in the tank farms, and are intended to collect stormwater from those areas where the potential for contact with oil or other contaminants is minimal. The majority of these catch basins are connected to the stormwater collection system that routes the water to one of three oil/water separators for

treatment. In areas where the potential for oil contact is very small or non-existent, the stormwater is routed directly to the municipal storm drain system or allowed to surface flow off-site. This system, including the various separators and their capacities, is described in greater detail in Section 5.0.

4.2.8 Process Water System

Like the stormwater system, the process water collection and treatment system consists of a network of catch basins, drains, lift stations, an oil/water separator and hydrocleaner treatment system, underground piping, and valves designed to collect process water and/or stormwater from areas or sources where potential contact with oil and other contaminants is moderate to high. These areas or sources include:

- Storage tank water draws
- Pump, valve, and flange containment pads within the tank farms
- Upper and Lower Lube Cells and F-Tank Farm
- Tank truck transfer areas except the Gasoline and Lube Oil Additive Unloading Stations
- Railcar Loading/Unloading Rack
- Dock transfer station containment systems
- Vapor Recovery Unit
- Boiler Room
- Laboratory
- Warehouse
- Maintenance Garage

The process system operates primarily by gravity flow although lift stations are used where necessary to transfer collected process water to the oil/water separator (Separator #003) and hydrocleaner in Tank Farm 1. The process water undergoes initial oil/water separation in Separator #003 where oil is recovered and pumped to the nearby slops tank (Tank 36) for storage and recycling. The water is then pumped from the separator to the hydrocleaner (a DAF type treatment unit) for further treatment prior to discharge through an inspection box to the municipal sewer system under the terminal's industrial waste water discharge permit.

4.3 Drainage Pattern

The Portland Terminal drainage pattern and storm and process water systems are shown on the general site drainage plan provided in Figure 4-3. The site plan also shows the facility layout, storage tank locations, transfer facility locations, secondary containment systems, buildings, stormwater outfalls, paved areas, and site access. In addition, the plan identifies areas that drain to the stormwater system and those that drain to the process water system. More detailed drainage diagrams are provided in Section 5.2. These containment, drainage collection, and stormwater/process systems are designed to prevent non-storm or untreated water from escaping into the Willamette River.

The majority of the stormwater runoff at the terminal drains to the stormwater collection and treatment system; however, the uncovered transfer facilities lube oil tank farms, and other higher-risk areas with potential for small leaks and drips (e.g., pump pads) drain to the process water collection and treatment system. Due to the facility's relative level surface, the terminal is designed to direct surface runoff to the nearest catch basin. However, the overall slope and drainage is to the northeast towards the river. Lift (pump) stations are used to transfer storm and process waters from areas where gravity drainage is insufficient.

4.4 Material Inventory

The Portland Terminal stores various grades of gasoline, lube oils, black oil, industrial fuel oils, distillates, and various lube oil and refined product additives (including ethanol) for distribution and sale. A comprehensive list of tank capacities and products is in Table 4-1. Insignificant quantities of hazardous wastes are also stored at the terminal and consist primarily of oily rags and sorbents, used oil, used antifreeze, spent non-halogenated solvents (i.e., hexane), and miscellaneous other wastes generated through normal terminal and vehicle maintenance operations. The oily rags and most other waste materials are temporarily stored in the Maintenance Garage. Drums and containers of hazardous wastes are stored in the waste storage area to the west of tank farm 3. This area is located on a concrete slab that drains to a central catch basin and then to the process water system; this area is covered, fenced and locked.

4.5 Source Identification

The potential sources of stormwater contamination at the Portland Terminal can be segregated into two categories including: 1) spills from storage or transfer operations that enter the stormwater drainage system, and 2) incidental contact of stormwater with drips or small leaks from storage or transfer equipment that could occur during normal terminal operations. In either case the contaminants of concern would be the lighter components of gasoline, diesel, and lube

oils that are generally the most soluble and often times the most toxic. Specifically, these would be benzene, ethylbenzene, toluene, and xylene as well as total petroleum hydrocarbons. Ethanol is also very soluble in water as are selected components of other additives.

Incidental contact of stormwater with products handled at the terminal could result from small drips or leaks occurring within the tank farms during or just prior to a storm event. This would preclude the implementation of repair and maintenance activities before contact occurs. Similarly, repair and maintenance activities may release small quantities of product which are generally cleaned up immediately but could contaminate stormwaters if a storm event occurred prior to effecting cleanup. A more probable source is the occasional drip of crankcase or lube oils from the tank trucks or vehicles passing through the terminal which could slightly contaminate stormwater contacting those areas.

The potential sources of contamination to the stormwater collection and treatment system by spills are:

- Tank Farms 1, 2, and 3,
- Lube Oil Additive Unloading Station by the F-Tank
- Gasoline Additive Unloading Station by Tank Farm 1

These sources have the potential to release petroleum products to the stormwater system which, in turn, can contaminate the stormwater by contact. In these areas, ConocoPhillips has designed safety features into the terminal equipment, maintenance plans, and operation procedures to prevent such occurrences. The following paragraphs describe the potential sources of spills at the Terminal. The preventive measures for these spills are more fully discussed in Section 6.4.

4.5.1 Tank Farms

In the tank farms, potential contamination sources are:

- Overfilling of a storage tank
- Small tank leaks
- Catastrophic failure of a storage tank
- Failure of a delivery or transfer pipeline

The potential for tank overfills entering the storm drain system is minimized by the high level alarms installed on tanks that receive product via pipeline or marine vessel. Overfill is also

minimized by the continual monitoring of tank levels on all tanks through remote gauges in the terminal control rooms. Closure of the separator discharge fail-close valves and the post indicator valves at the terminal boundary prevents spills from migrating off-site and entering the municipal storm drain system. The separator discharge valves are generally kept closed except during storm events when they are opened as necessary to drain the separators.

The probability that spills from small tank leaks or pipeline failures will enter the storm drain system is also minimized by spill detection and source shutdown through monitoring of tank levels at the control room, periodic inspection rounds by the operators, and relatively constant presence of operations and maintenance personnel in the tank farms during their normal daily activities. Should a spill occur, terminal personnel can often quickly isolate the affected area and prevent product from entering the drainage system and/or separators. Terminal personnel are also trained in operating procedures designed to prevent spills and mitigate damage should a spill occur.

4.5.2 Lube Oil Additive Unloading Station

At the Lube Oil Additive Unloading Station, potential contamination sources are:

- Transfer hose/fitting leak or failure
- Tank truck leak or failure

The Lube Oil Additive Unloading Station is adjacent to the F-Tank Farm and is situated on a paved area but is not equipped with a dedicated containment system. Potential spills would flow down-gradient towards a nearby stormwater catch basin that drains directly to the municipal storm drain system and not to an oil/water separator. Therefore, terminal procedures require operators to seal off the catch basin with a magnetic cover during transfers to prevent potential spills from entering the basin and stormwater system. Sorbent tubes are also available to surround the catch basin and further prevent spills from entering the drain.

If a spill were to occur, it would flow past the stormwater catch basin and continue down-gradient to the nearby process water catch basin and be contained by the process water system. Operators and/or truck drivers are required to be in attendance at all times during transfers and can rapidly detect any spills, terminate the transfer, and take the necessary actions to mitigate and contain the spill.

4.5.3 Refined Products Additive Unloading Station

At the Refined Products Additive Unloading Station, potential contamination sources are:

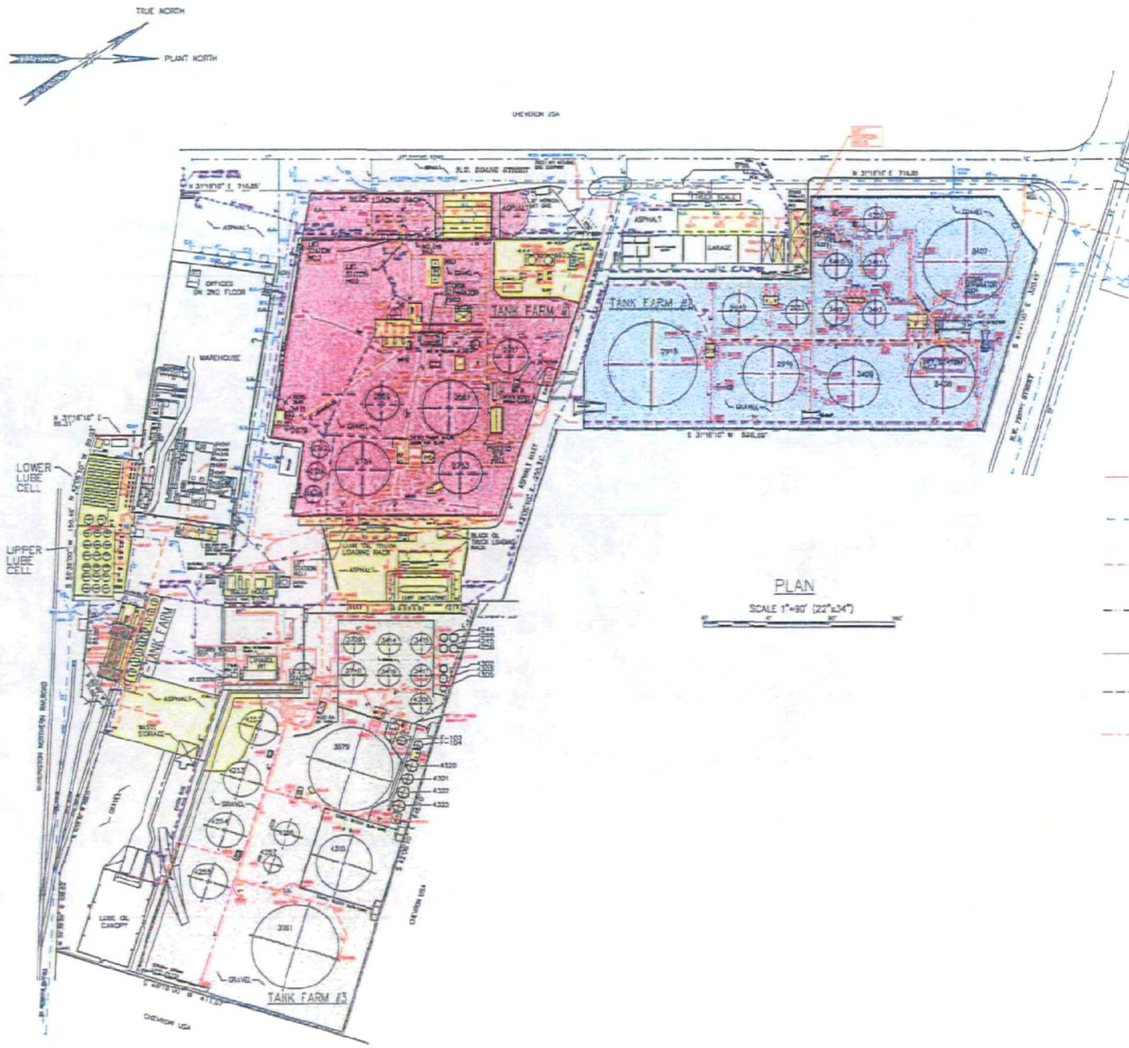
- Transfer hose/fitting leak or failure
- Tank truck leak or failure

The Refined Products Additive Unloading Station is located directly north of the Refined Product Loading Rack. It is situated on a paved area which is graded such that potential spills would flow down-gradient primarily towards the Refined Product Loading Rack containment area. Spills at the station could also flow to a stormwater catch basin that drains to oil/water Separator #002 in Tank Farm 1. Therefore, terminal procedures require operators to seal off the catch basin with a magnetic cover during transfers to prevent potential spills from entering the basin and oil/water Separator #002.

If a spill were to occur, it would be contained in the area surrounding the catch basins and/or drain to the Refined Product Loading Rack containment area. Operators and/or truck drivers are required to be in attendance at all times during transfers and can rapidly detect any spills, terminate the transfer, and take the necessary actions to mitigate and contain the spill.

Table 4-4 Impervious Stormwater Areas:

Area Description	Area ft^2	Comments
Tank Farms		
Tank Farm 1		
Storage Tank Roofs	18201	
Paved Areas	1004	
Tank Farm 1 Total	**19205**	
Tank Farm 2		
Storage Tank Roofs	44557	
Paved Areas	1314	
Tank Farm 2 Total	**45871**	
Tank Farm 3		
Storage Tank Roofs	43678	
Paved Areas	1520	
Tank Farm 3 Total	**45198**	
Areas outside Tank Farms		
Area 1 -Lube Warehouse, Truck Rack, Driveway		
Roofs	58695	Includes truck rack canopy
Pavement	74992	
Total Area 1	**133687**	
Area 2 - Maintenance Building Area		
Roofs	13685	
Pavement	27448	
Total Area 2	**41133**	
Area 3 - Lube Warehouse #2, Boiler Room		
Roofs	12000	
Pavement	60302	
Total Area 3	**72302**	
Total Areas	**357396**	



PLAN
SCALE 1"=80' (22"x34")

LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- RECOVERED OIL TO STORAGE
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- UNTREATED DRAINAGE
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #001
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #002
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #004

DRAWING NO.	REFERENCE DRAWING
0608-C-7020	DOCK FACILITIES GENERAL ARRANGEMENT
0608-C-7021	TANK FARM NO.1 GENERAL ARRANGEMENT
0608-C-7022	TANK FARM NO.2 GENERAL ARRANGEMENT
0608-C-7023	TANK FARM NO.3 GENERAL ARRANGEMENT

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENT	DAB	MK	WHB	03/08/97
B	GENERAL UPDATE	DAB	MK	WHB	03/26/97
C	REVISE STORM DRAINAGE LEGEND	DAB	MK	WHB	07/24/97
D	REMOVED FIGURE NUMBER AND REVISED LOGO	DKB	WHB	WHB	03/14/03
E	ADD LUBE OIL CANOPY AND WASTE STORAGE	DKB	WHB	WHB	11/22/04
F	UPDATED DRAWING	CEW	DAB	WHB	12/08/06

NO. | REVISION DESCRIPTION | REV BY | CHK BY | APPR. BY | DATE

ConocoPhillips Pipe Line Company
5528 N.W. DOANE AVE
PORTLAND OREGON

DR. D.A.BYNUM		CONTRACTOR No.	
DSGN. D.A.BYNUM		PROJECT NO. 25-31	
CK. MK	AP. KJP	DWG. SCALE AS SHOWN	
DATE 03/16/97		PLOT SCALE	

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2909 NW 29th AVE, PORTLAND, OR. 97210 Tel:(503)227-2317,Fax:(503)227-2244

AEC PROJECT NUMBER: 25-31

PORTLAND TERMINAL

TITLE: SITE PLAN DRAINAGE AREAS

DWG. No. 0608-C-7010 | SHEET 1 OF 1 | REV. No. F

5.0 FACILITY DESIGN - BEST MANAGEMENT PRACTICE IDENTIFICATION

The following paragraphs discuss the best management practices (BMPs) or controls that ConocoPhillips has implemented at the Portland Terminal to prevent the release of petroleum products or oily stormwater from the terminal.

5.1 Exposure Prevention

Materials stored at the terminal are not exposed to stormwater at any time as they are contained in enclosed storage tanks, piping, or transfer hoses. The only potential exposure of petroleum products to contact with stormwater that does not drain to the process water system is minor leaks or spills that may occur in the tank farms or drips from vehicles calling on the terminal. Leaks or spills may also occur from transfer piping outside the tank farms, or from tank trucks entering or leaving the terminal. Small spills can occur during equipment maintenance or repair activities. These operational or maintenance related spills or leaks are generally cleaned up immediately but if they happen during rainfall events, contact with stormwater could occur.

The equipment or areas that have the highest probability for the occurrence of small leaks or drips within the terminal and the subsequent contact with stormwater include the product transfer stations that do not drain to the process water system and selected valves and flanges along the above ground piping. All of the pumps and the large majority of valves and flanges are equipped with underlying concrete containment pads that drain to the process water system.

Most transfer stations are covered to minimize the collection of stormwater; they all drain to the process water system with the exception of the Lube Oil and Gasoline Additive Unloading Stations. Both stations are used infrequently and exposure prevention measures are discussed in Section 4.5.2 and 4.5.3.

To further prevent or minimize the exposure of stormwater to contact with petroleum products, the drains to the terminal's storm, process, and sanitary sewer systems are color coded. Drains/catch basins, valves, manholes, and cleanouts associated with the stormwater system that drain to one of the oil/water separators are color coded purple whereas orange is used for similar equipment associated with the process water system. There are no external drains to the sanitary sewer system but all corresponding manholes, cleanouts, and valves, including those connecting the process water treatment system to the sanitary sewer are color coded green. Terminal storm drains, manholes, valves, etc., associated with lines draining directly to

the municipal storm drain system, including the discharge lines from the stormwater separators, are color coded light blue.

The color coding of the different drainage systems enables facility personnel to quickly identify the ultimate destination of liquids entering the drains. If a small spill does occur and is flowing towards a purple or blue catch basin, personnel will take quick action to contain the spill or block the catch basin to prevent contamination of the stormwater system. Should a spill enter the system, the color coding of the valves also enables quick identification of which valve(s) to close to isolate the affected portion of the system. Each drainage system is equipped with a "Post Indicator Valve" where the piping exits the terminal (most valves are along Doane Avenue) and can be used to further prevent spills from leaving the terminal.

5.2 Stormwater System

Rainfall within the majority of the terminal is collected and treated by the stormwater system prior to being discharged to the Willamette River. The stormwater drainage area includes the tank farms, terminal parking areas, vehicle access areas, graveled areas, and paved drives. Drainage from product transfer areas, which is collected and treated by the process water system, is discussed below in Section 5.3.

The stormwater collection and treatment system consists of four separate subsystems. Tank Farms 1, 2, and 3 each have their own stormwater collection and treatment subsystem with the fourth consisting of several collection systems that discharge untreated stormwater collected along vehicle drives and parking areas to the municipal storm sewers and ultimately to the Willamette River. In some cases, the tank farm systems also collect and treat stormwater from adjacent areas.

The areas that drain to each of the stormwater treatment subsystems associated with Tank Farms 1, 2, 3, and the dock area are shown in the drainage plans at the end of this section. Those areas that drain to the process water system are also shown on the figures as are the various catch basins and storm, process, sanitary, and city water piping systems. As shown, the areas draining to the different separators are color coded as are the catch basins and connecting pipelines. Those areas not colored (shown in white) either drain directly to the municipal stormwater system (i.e., do not pass through an oil/water separator) or surface flows off-site.

5.2.1 Tank Farms

The stormwater systems in Tank Farms 1, 2, and 3 each consist of several catch basins located at topographical low points with interconnecting pipelines that direct stormwater runoff to an API type oil/water separator. Effluent from the separators is discharged through underground piping to the municipal storm sewer either on Doane Avenue, just to the west of the terminal, or Kittridge Avenue approximately 1/2 mile to the east. The individual tank farms, associated separators, separator capacities and discharge points are listed below:

Tank Farm	Separator Number	Capacity	Discharge Point
1	002	7,125 gal	Doane Avenue
2	004	23,060 gal	Doane Avenue
3	001	17,300 gal	Kittridge Avenue

Stormwater runoff and all other liquids from the Upper and Lower Lube Cells and the F-Tank Farm are routed to the process water system.

The separators, including the final box prior to discharge, are open at the top to allow for visual monitoring. The separator discharge valves are generally kept closed except during storm events as an additional measure to prevent the potential for large accidental spills from being discharged off-site through the stormwater separators. These valves will also close in the event of a power failure. The condition of the water in the final boxes of the separators is visually monitored; any evidence of oil or other contamination is removed prior to discharge.

In addition to collecting and treating runoff within the tank farms themselves, the stormwater systems for Tank Farms 1 and 3 also collect some runoff from adjacent areas. Runoff from the paved areas to the south and just north of the refined products loading rack is collected in catch basins which drain to Lift Station 2 just to the west of Tank Farm 1. The runoff is then automatically pumped from Lift Station 2 to Separator #002 within Tank Farm 1 for treatment.

Runoff from the paved area outside the west corner of Tank Farm 3 near Separator #001 is collected by a catch basin near the separator and gravity drains directly to the separator itself. Because Separator #001 is outside the tank farm containment dike, runoff collected from within the tank farm drains to Lift Station 4 where it is automatically pumped to Separator #001 for treatment.

5.2.2 Other Areas

Stormwater from areas outside the tank farms not discussed in Section 5.2.1 above and that do not drain to the process water system is either transported through underground piping to a municipal storm sewer or surface flows off-site to surrounding areas. The latter occurs primarily in the gravel area to the southwest of Tank Farm 3 where the surface is graded towards the railroad tracks to the west and then southeast towards Kittridge Avenue.

Most of the runoff from the roof drains and paved areas to the southwest of Tank Farms 1 and 3 flows into catch basins and then through underground piping along the alley between Tank Farm 1 and the warehouse to the municipal storm sewer along Doane Avenue. The small area just to the west of the rail car loading/unloading station flows to a catch basin which drains into the underground piping that transfers effluent from Separator #001 to the municipal storm sewer along Kittridge Avenue.

The other portions of the main terminal including: 1) the area to the east of the Black Oil/Lube Oil Loading Racks, 2) the alley between Tank Farms 1 and 2, and 3) the roof drains and paved areas around the maintenance building and garage all drain through underground piping to the municipal storm sewer along Doane Avenue. Runoff from the paved and open areas around the Asphalt Shed building near the dock flow primarily to catch basins that discharge either directly to the Willamette River or to the municipal storm sewer along Front Street that, in turn, discharges to the Willamette River. Some runoff also surface flows to adjacent off-site areas.

5.3 Process Water System

The primary sources of surface drainage that flow to the process water system are the runoff from the following areas:

- Pump containment area in the northeast corner of Tank Farm 1
- Southwest corner of Tank Farm 3
- Lower and Upper Lube Cells
- F-Tank Farm
- Refined Product Loading Rack
- Lube, RFO and Black Oil Truck Rack area
- Railcar Loading/Unloading Stations
- Tank Truck Unloading Station
- Vessel Loading/Unloading and Tug Fueling Stations

- Hazardous Waste Storage Area

Other minor sources of liquids, including tank water draws and stormwater runoff, that drain to the process water system include the various concrete containment pads beneath the pumps, valves, flanges, and the vapor recovery unit within the tank farms, floor drains within the boiler house and maintenance garage, and the laboratory drains.

The process water system consists of numerous catch basins that drain to interconnecting underground piping that all discharge to an API-type oil/water separator (Separator #003) in Tank Farm 1. Effluent from the separator is processed through dissolved air floatation (DAF) type hydrocleaner, which then drains to a final inspection box before being discharged to the municipal sanitary sewer along Doane Avenue. Oil recovered from the separator and hydrocleaner is pumped to Tank 36 (slops tank) in Tank Farm 1 for storage prior to blending into black oil being sold for boiler fuel.

The process water collection system is equipped with a number of valves which allows for the isolation of various portions of the system if the need arises. There are also several lift stations that can be deactivated to further isolate spills or other discharges to the process system. Valves are installed on the separator and hydrocleaner discharge points as well as the final inspection box. A "Post Indicator Valve" is located along Doane Avenue where the process system discharge line connects to the municipal sanitary sewer line; this can be closed to prevent spills or out-of-compliance process water from reaching the municipal sewer system.

As with the stormwater separators the inspection box is also open at the top to allow for visual monitoring prior to discharge. The fail-close valve will also close in the event of a power failure. In these situations, the lift pumps feeding the process separator will continue operating to prevent the associated lift stations from overflowing.

5.4 Drainage and Containment Equipment and Spill Prevention Procedures

5.4.1 Management Practices

The petroleum product storage and transfer facilities at the Portland Terminal are equipped with a variety of spill prevention and containment devices. Best management practices are followed to isolate all potential sources of contamination from the stormwater system. Transfers of products are conducted in areas that are segregated from stormwater drainage areas by walls, curbs, or other means of containment. Management procedures stress safe transfer

operations, maintenance of safety and containment systems, and rapid, accurate communications between operating personnel.

Whenever products are being transferred, facility personnel have access to internal alarms or emergency communication devices. Employees do not work on the premises alone unless they have immediate access to a cellular telephone or a hand-held, two-way radio, or are otherwise capable or summoning assistance in the event of a spill or other emergency.

Spill prevention and containment equipment and procedures implemented at each of the product storage and transfer areas at the terminal are described below.

5.4.2 Tank Farms

Secondary containment for the tank farms and lube cells is provided by concrete block, cast-in-place concrete walls or asphalt covered berms on all sides. The base in Tank Farms 1, 2, and 3 consists primarily of silty, sandy fill overlain by gravel in some areas whereas the lube cells and F-Tank Farm are equipped with concrete liners. The containment capacity of each tank farm is designed to hold the maximum capacity of the largest storage tank plus the rainfall from a 25 year/24 hour storm and 20 minutes of fire protection water. The actual containment volumes and calculations for each tank farm are provided in the facility's SPCC plan.

The discharge valves from the stormwater separators to the municipal stormwater system are normally kept closed except during storm events when they are opened as necessary to drain water accumulations in the separators. This is done as an additional safeguard to prevent potential spills from entering the municipal stormwater system. The valves are fitted with position indicators that can be monitored by operators in the control room to determine if the valves are closed or open. The discharge valves are pneumatic and designed to fail close in the event of a power failure, loss of air pressure, or emergency shut down.

The storage tanks are equipped with various level gauges and overfill alarms. Each tank is equipped with an automatic tank level gauge at the base of the tank that can be monitored visually by terminal personnel. Tank levels are also indicated on a computerized gauging system monitor in the terminal control rooms. If the volume in a tank reaches a preset level, the system will activate both a visual and an audible high level alarm in the control room. If the tank volume continues to increase, a redundant high level alarm will be triggered which activates another audible alarm in the control rooms as well as emergency horns strategically located throughout the terminal. The redundant high level alarms are set to activate approximately 35 minutes before the tank overflows at the tank's maximum fill rate.

All tanks were designed to meet or exceed the requirements of the applicable standards and regulations at the time of construction. The tanks are generally maintained and inspected per API 653 including periodic internal and external inspections and non-destructive shell thickness testing to verify tank condition and integrity. In addition, when a tank is removed from service, its interior is usually inspected and any necessary repairs are made prior to returning the tank to service.

5.4.3 Refined Product Loading Rack

The bulk transfer of refined products (i.e., gasoline, diesel, heating oil, and jet fuel) from the storage tanks to tank trucks is conducted at the Refined Product Loading Rack along Doane Avenue. The racks are constructed on a concrete pad with perimeter curbing and strip drains at either end forming the containment area. The racks are covered with a canopy to minimize the intrusion of stormwater into the containment area. The strip drains are connected to a 10,000 gallon underground spill containment. The rack's concrete containment area and 10,000 gallon tank and process system are intended to contain at least a 4,000 gallon spill, which is greater than the largest compartment of a typical tank truck and trailer.

The loading rack is equipped with an overfill protection system and meter stops that are designed to automatically stop filling tank trucks when they become full. The rack is also equipped with brake interlock equipment to prevent the trucks from departing before the transfer hoses are disconnected. The truck drivers are also instructed to inspect the trucks and drain valves for leakage prior to departure.

5.4.4 Lube, RFO and Black Oil Truck Rack Area

The bulk transfer of lube, RFO and black oils into tank trucks and the unloading of lube oil base stocks and RFO from tank trucks are conducted in the lube, RFO and Black Oil Truck Rack Area between Tank Farms 1 and 3. The Lube Oil Loading Rack and a second RFO Unloading Station are located adjacent to Tank Farm 1, with the Black Oil Loading Rack located in the middle and the Lube Oil/RFO Unloading Station is adjacent to Tank Farms 3. The entire area is paved and equipped with perimeter asphalt and concrete berms. Several catch basins drain the area to the process water system; although the Lube and Black Oil Truck Racks are equipped with canopies, the majority of the area is uncovered. The entire area is designed to contain the largest foreseeable spill of 4,000 gallons, which is greater than the largest compartment of a typical tank truck or trailer.

These truck racks do not have automated overfill protection but the Black Oil/RFO Loading Rack is equipped with a spring loaded "deadman switch" that requires constant pressure from the operator to continue loading operations. Although the Lube Oil Loading Rack is not equipped with "deadman valves," operators are required to be in attendance at the rack at all times during loading. Therefore, the loading of lube and black oils must be continuously manned and monitored providing immediate detection and shutdown of potential spills. As with the Refined Product Loading Rack, the drivers are instructed to inspect their trucks and drain valves after filling and prior to departure.

The Lube Oil/RFO Unloading Station and second RFO Unloading Station are not equipped with any mechanical spill prevention devices as there is no potential to overfill a vehicle. The only spill potential is related to leaks in, or ruptures of, the transfer hoses or failures of the truck tanks or valves. The containment system around the unloading stations drains to the process system and is more than adequate to prevent potential spills from escaping the unloading area and reaching the stormwater system.

5.4.5 Lube Oil Additive Unloading Station

The Lube Additive Unloading Station is situated adjacent to the F-Tank Farm and is used to transfer additives from tank trucks to storage tanks in the F-Tank Farm. The transfers are made via flexible hoses connected between the tank truck and the storage tanks. The area is paved but not equipped with a dedicated containment system. Terminal procedures require the operators to place a magnetic cover over the nearby stormwater catch basin during additive transfers as that basin drains directly to the municipal stormwater system. This will prevent spills from entering the stormwater system and cause them to continue flowing down-gradient to the process water catch basin beneath the laboratory.

5.4.6 Railcar Loading/Unloading Rack

The Railcar Loading/Unloading Rack, located southeast of the lube cells and adjacent to the F-Tank Farm, is used for offloading of ethanol, lube oil base stocks, and lube oil additives and the loading of finished lube oils. The rack consists of four transfer stations to accommodate two railcars on each side. The railcars are unloaded using flexible hoses attached to the bottom of the cars; loading occurs at the top of the cars through pivoting arms and flexible hoses.

The railcar area is situated in a natural depression with an asphalt berm at one end to provide

adequate containment. Each station is equipped with a dished concrete apron and catch basin, which drain to the process water system. There are no stormwater drains in this area. The combination of the natural depression, catch basins, and the capacity of the process water system provides more than sufficient containment for the contents of the largest railcar (30,000 gallons).

Spill prevention is achieved by training operators in proper procedures for railcar loading and unloading. Transfer operations are not generally manned continuously but personnel are required to monitor transfer operations at least every 20 minutes. An operator is, however, required to continuously monitor levels in the railcars during the loading of the final 2,000 gallons. If a spill were to occur, the concrete aprons and catch basins will catch the product and drain it to the process water system. In addition, during the unloading of black oil, drainage from the area is routed to the ethanol spill basin prevent potential spills from entering the process system. The spill basin itself has a capacity of 40,000 gallons, which will easily contain the contents of the largest railcar (30,000 gallons).

5.4.7 Tank Truck Unloading Station

The Truck Unloading Station is located adjacent to the northwest side of the Maintenance Garage and consists of two dished concrete pads that drain to separate process water catch basins. Any spills would collect in the catch basins and drain to the process water system for recovery at the separator. The containment capacity of the dished areas and catch basins is more than adequate to contain the largest single compartment of a tank truck, which is 3,800 gallons.

5.4.8 Refined Products Additive Unloading Station

The Refined Products Additive Unloading Station is located east of the Refined Products Loading Rack and north of Tank Farm 1 and is used to transfer additives from tank trucks to Tank 4441 and Tank 3623 in Tank Farm 1. The transfers are made via flexible hoses connected between the tank truck and additive pipeline along the north perimeter of Tank Farm 1. The area is paved but not equipped with a dedicated containment system. Spills or leaks at the station will primarily drain to the south towards the Refined Product Loading Rack containment area. Larger spills could also drain to the west to a catch basin connected to the stormwater oil/water Separator #002 in Tank Farm 1. Therefore, terminal procedures require the operators to place a magnetic cover over the catch basin during additive transfers. This will prevent spills from entering the stormwater system and cause them to collect in the area surrounding the catch basin and/or drain to the loading rack containment area.

5.4.9 Vessel Loading/Unloading and Tug Fueling Stations

The terminal dock located on the Willamette River is used for loading and unloading gasoline, diesel, heating oil, black oil and lube oil. Barges, tankers and tugs moored at the dock use flexible hoses to transfer oil and products between the vessel and the terminal product storage tanks.

There are no stormwater drains on the dock. The dock risers and tug fueling/lube oil dispensers are located on a dished concrete pad that drain to a 2,050 gallon holding tank located beneath the dock. The contents of the holding tank are automatically transferred to the process water system located in Tank Farm 1.

Spills are prevented by the attendance of at least two personnel during the entire transfer operations: one of the vessel crew and one of the terminal operators. These personnel are trained in procedures for proper product transfer and are familiar with emergency procedures in case of a spill.

Prior to receiving a vessel, terminal personnel check to ensure that the receiving tank or tanks have the capacity to accept the quantity of oil to be transferred. In addition, the cargo hoses used for marine transfers are pressure tested regularly and replaced as required to minimize the potential for leaks or ruptures.

5.4.10 Hazardous Waste Storage Area

The Hazardous Waste Storage Area is located outside the southwest corner of Tank Farm 3 and consists of a concrete pad surrounded by a 6-inch curb that drains to a process water catch basin. The drain is covered with a magnetic spill pad. If a hazardous waste spill drains past the spill paid, it would collect in the catch basin and drain to the process water system for recovery at the separator. The containment capacity of the curbed area and catch basins is more than adequate to contain the largest single container that will be stored in the area, which is 55 gallons.

5.4.11 Olympic Pipelines

Potential spills caused by a delivery pipeline failure within the dike walls will be contained therein. The potential for such a failure is minimized by inclusion of thermal relief valves on the lines and

regular inspection of the overall system. In the event of a pipeline failure, the spill could be detected visually by personnel operating in the area or by an insufficient delivery rate at the control room. Olympic Pipeline personnel also monitor pressures and flow rates on their pipelines and will rapidly detect a moderate to large leak and shut down the pipeline.

5.4.12 Other Runoff Sources

There are no other operations or equipment in the Portland Terminal that could reasonably be expected to cause a spill or result in the contamination of stormwater runoff.

5.5 Housekeeping

As part of ConocoPhillips's best management practices, the operators practice the following operational procedures to reduce the potential for pollutants to enter the stormwater discharge:

- All spills and leaks will be cleaned up immediately or as soon as practical.
- All outdoor areas of the facility are kept clean and orderly.
- Activities such as vehicle washing, equipment washing, pad wash downs and any other activity which generates non-stormwater are conducted in areas which are contained or drain to the process water system.
- Vehicle maintenance activity will be conducted within the garage structure or within a contained area, whenever possible. Any contamination resulting from a maintenance activity will be removed immediately.
- Loading and unloading areas at the terminal and the dock are maintained and inspected for signs of spillage.

5.6 Preventive Maintenance

ConocoPhillips regularly inspects and maintains all pertinent equipment to reduce the likelihood of a spill getting into the stormwater system. The stormwater and process water systems are inspected daily to ensure effective operation. Any significant accumulations of oil in the oil/water

separator will be recovered and recycled.

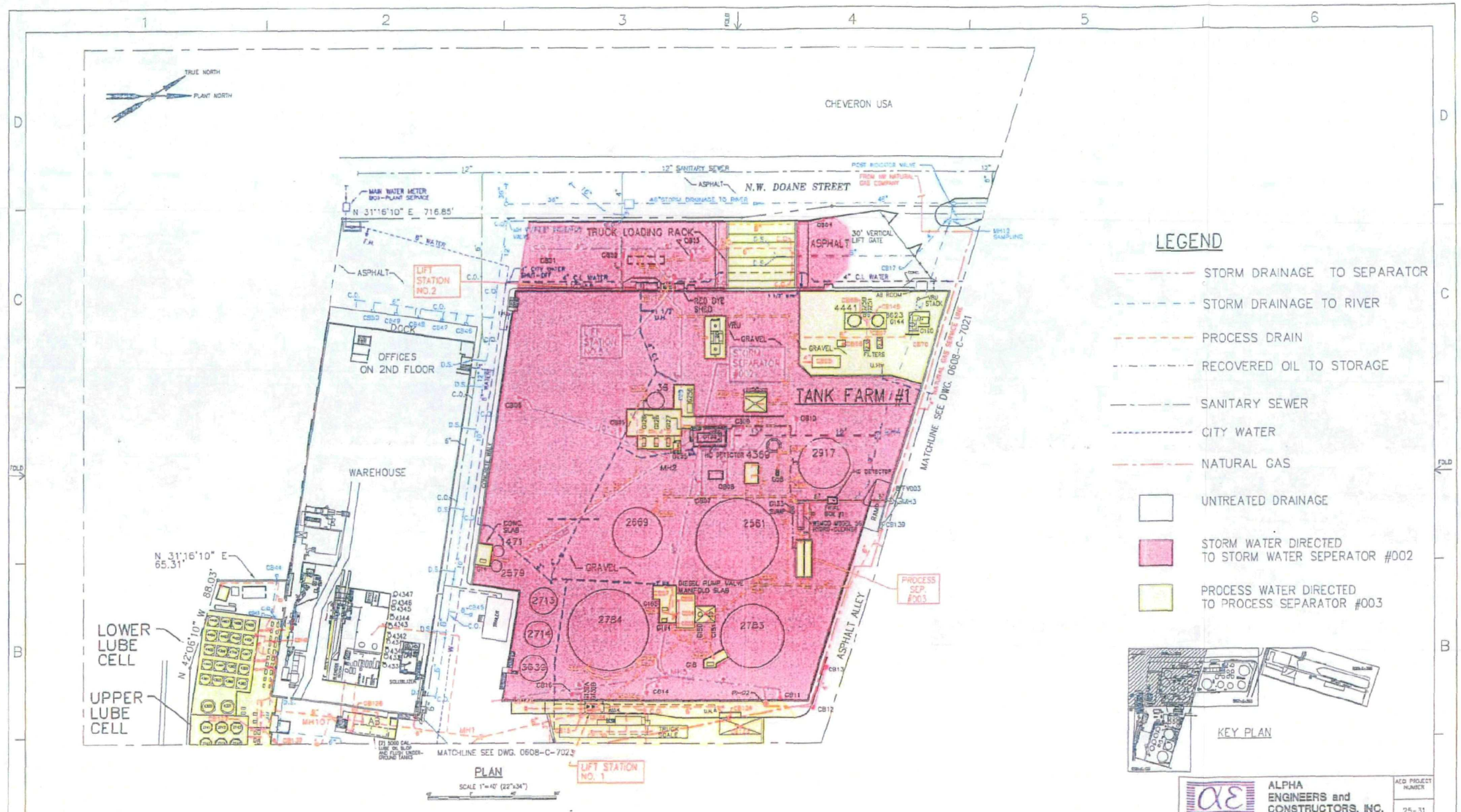
In addition, the terminal operators perform at least two visual inspections per day of the entire terminal including tanks, containment systems, pipelines, and process and stormwater collection systems. Any problems or potential problems are noted and rectified as soon as practical.

5.7 Spill Response

ConocoPhillips has prepared a Spill Prevention Control and Countermeasure (SPCC) Plan and an Emergency Response Plan, which identify methods of spill prevention and the response and notification procedures, which should be followed in the event of a spill. The Emergency Response Plan contains the response and notification procedures, as well as lists of equipment maintained at the facility, in addition to equipment available from local contractors. These plans have been reviewed by the appropriate terminal personnel and are available to all personnel at all times.

5.8 Sediment and Erosion Control

All dike walls used for spill containment are made of cast-in-place concrete, concrete block, concrete or asphalt curbing, or asphalt covered earthen berms. To control traffic related erosion, the terminal access ways and parking are paved with asphalt. All operation areas of the terminal are covered with gravel, paved with asphalt, and/or contained by a curb to prevent sediment accumulation and land erosion. The exception is the unused strip of land behind the Asphalt Shed (warehouse) near the dock. No erosion control is provided in this area as it is not used for operational activities.



LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- RECOVERED OIL TO STORAGE
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- UNTREATED DRAINAGE
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #002
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003

KEY PLAN

DRAWING NO.	REFERENCE DRAWING
0608-C-7021	TANK FARM NO.2 GENERAL ARRANGEMENT
0608-C-7023	TANK FARM NO.3 GENERAL ARRANGEMENT

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENT	DAB	MK	WHB	03/06/97
B	GENERAL UPDATE	DAB	MK	WHB	03/26/97
C	REVISE STORM DRAINAGE LEGEND	DAB	MK	WHB	07/24/97
D	UPDATED FOR SWPCP	DAB	SM	WHB	02/12/98
E	UPDATE TO REFLECT CHANGES ON 0608-C-7000	DAB	SM	WHB	09/10/99
F	REMOVE FIGURE NO. AND REVISE LOGO	QHB	WHB	WHB	03/04/03
G	UPDATE TITLEBLOCK	CDW	WHB	WHB	12/08/05

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

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DR. DABYNUM	CONTRACTOR No.
DSGN. DABYNUM	PROJECT NO. 25-31
CK. MK AP. KJP	DWG. SCALE AS SHOWN
DATE 03/18/97	PLOT SCALE

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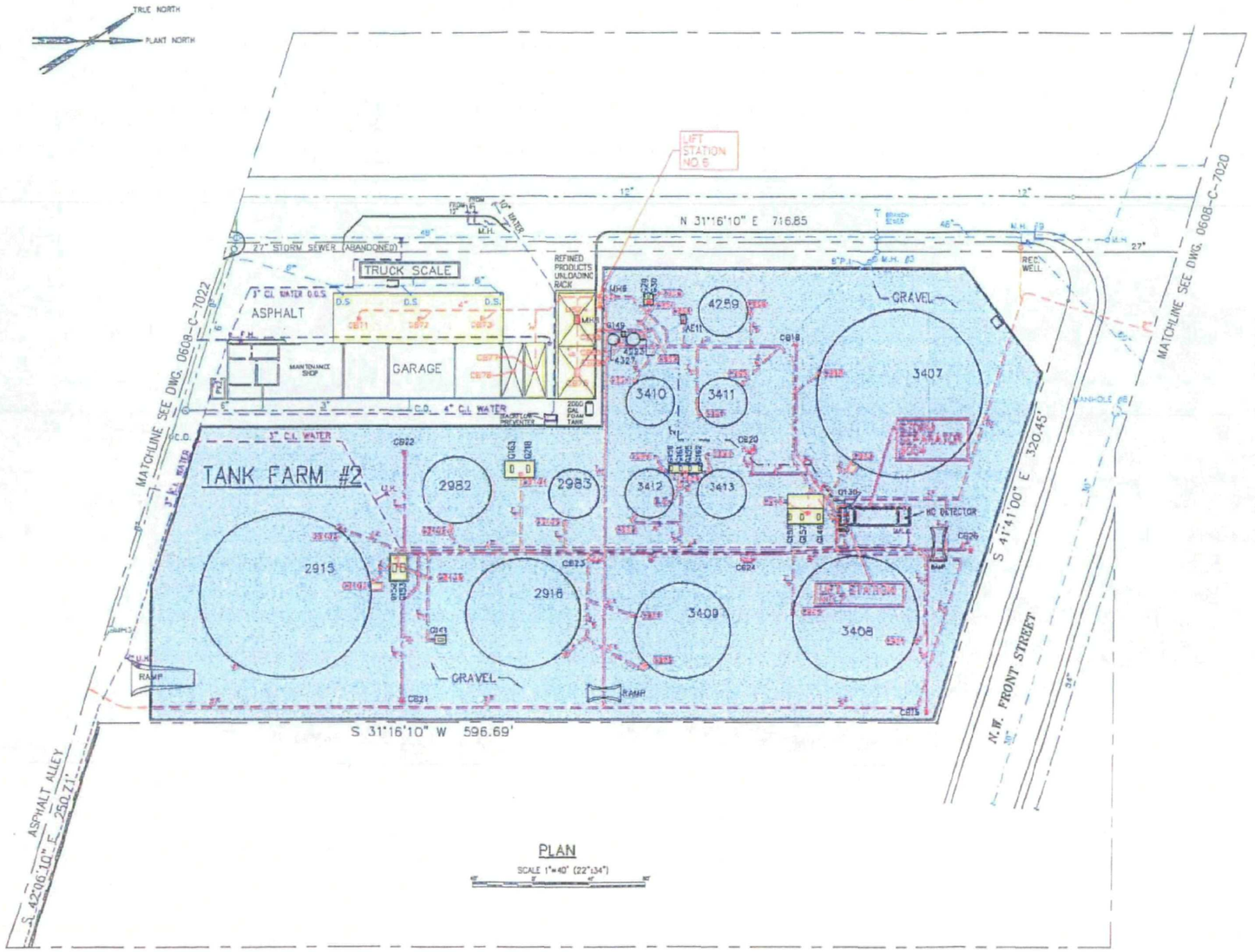
ACE PROJECT NUMBER: 25-31

PORTLAND TERMINAL

TITLE: TANK FARM 1
SITE DRAINAGE PLAN

DWG. No. 0608-C-7022 | SHEET 1 OF 1 | REV. No. G

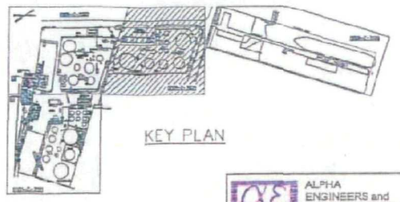


PLAN

SCALE 1"=40' (22"x34")

LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- RECOVERED OIL TO STORAGE
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- UNTREATED DRAINAGE
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #004
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003



KEY PLAN

DRAWING NO.	REFERENCE DRAWING
0608-C-7020	DOCK FACILITIES GENERAL ARRANGEMENT
0608-C-7021	TANK FARM NO.1 GENERAL ARRANGEMENT

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENT	DAB	MK	WHB	03/06/97
B	GENERAL UPDATE	DAB	MK	WHB	03/26/97
C	REVISE STORM DRAINAGE LEGEND	DAB	MK	WHB	07/24/97
D	UPDATED FOR SWPCP	DAB	SM	WHB	02/12/98
E	UPDATE FOR CHANGES ON 0608-C-7000	DAB	SM	WHB	09/10/99
F	REMOVE FIGURE NO. AND REVISED LOGO	DKB	WHB	WHB	03/14/03
G	UPDATED TITLEBLOCK	DEW	WHB	WHB	12/08/06

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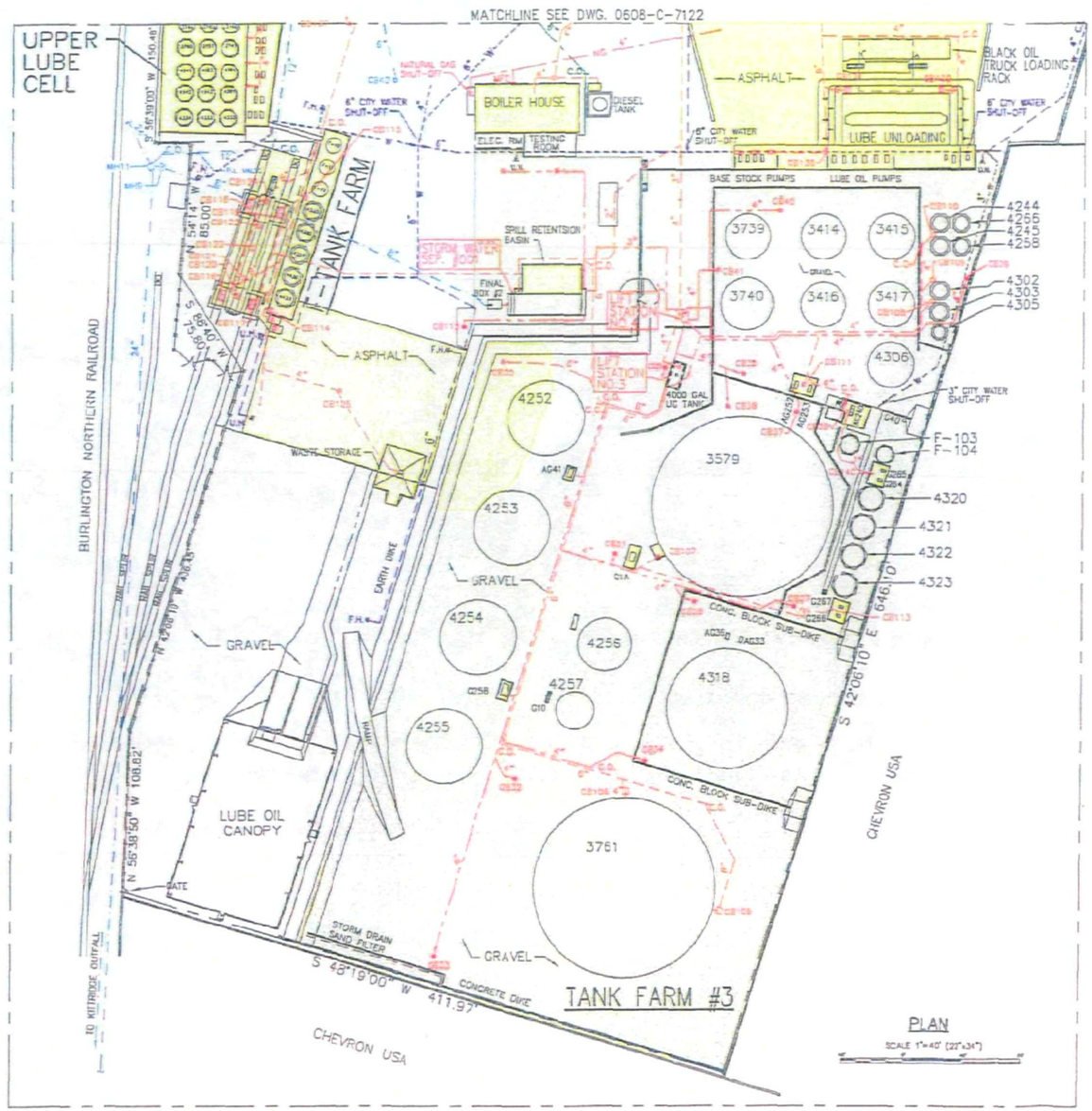
DR.	D.A.EYNUM	CONTRACTOR No.	
DSGN.	D.A.EYNUM	PROJECT NO. 25-31	
CK. MK	AP. KJP	DWG. SCALE AS SHOWN	
DATE	03/18/97	PLOT SCALE	

ALPHA ENGINEERS and CONSTRUCTORS, INC. — AEC PROJECT NUMBER 25-31

PORTLAND TERMINAL

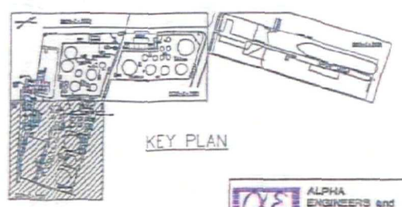
TITLE: TANK FARM 2
SITE DRAINAGE PLAN

DWG. No. 0608-C-7021 — SHEET 1 OF 1 — REV. No. G



LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- UNTREATED DRAINAGE
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #001
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003



KEY PLAN

DRAWING NO.	REFERENCE DRAWING
0608-C-7021	TANK FARM NO.3 GENERAL ARRANGEMENT

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENT	DAB	MK	WHB	03/06/97
B	GENERAL UPDATE	DAB	MK	WHB	03/26/97
C	REVISE STORM DRAINAGE LEGEND	DAB	MK	WHB	07/24/97
D	UPDATED FOR SWPCP	DAB	SM	WHB	02/12/98
E	UPDATE FOR CHANGES ON 0608-C-7000	DAB	SM	WHB	09/10/99
F	REMOVE FIGURE NO. AND REVISED LOGO	DHD	WHD	WHD	03/14/03
G	UPDATED TITLEBLOCK	DEW	WHB	WHB	12/08/05

ConocoPhillips Pipe Line Company
5228 SW DOANE, AVE.
PORTLAND OR 97210

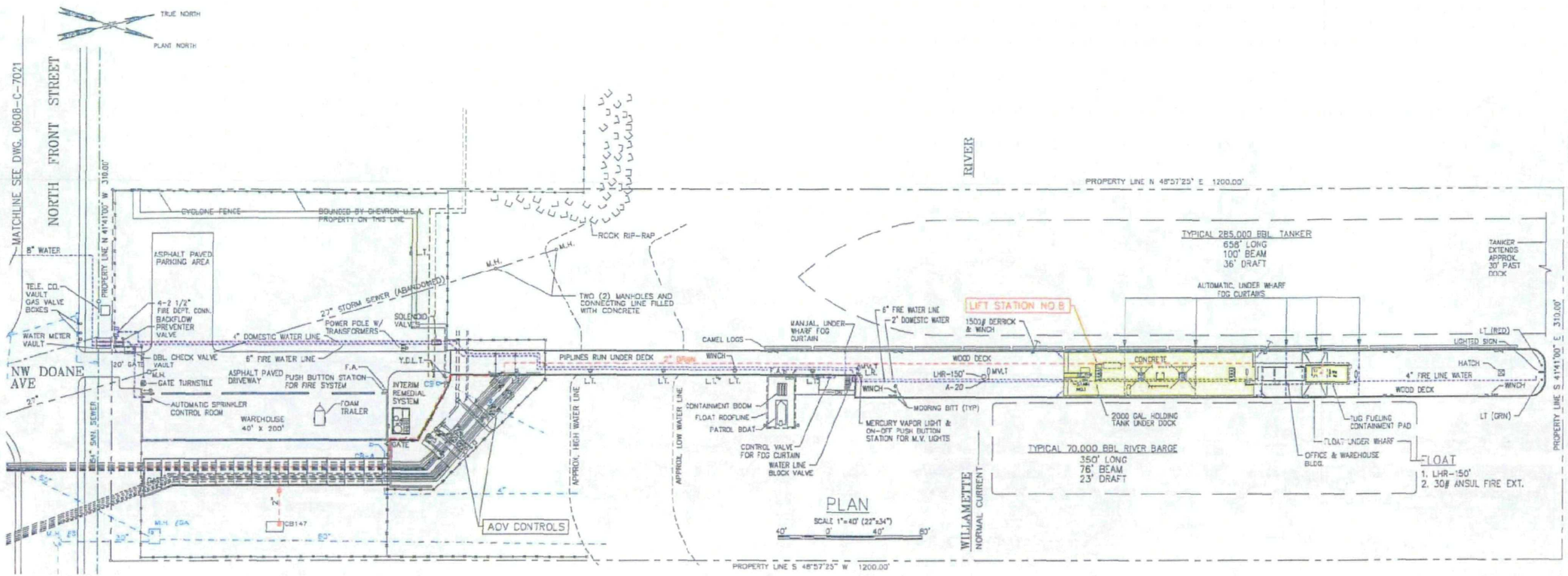
DR.	D.A.BYNUM	CONTRACTOR No.	
DSGN.	D.A.BYNUM	PROJECT NO. 25-31	
CK.	MK	AP. KJP	DWG. SCALE AS SHOWN
DATE	03/16/97	PLOT SCALE	

ALPHA ENGINEERS and CONSTRUCTORS, INC. — AEC PROJECT NUMBER 25-31

PORTLAND TERMINAL

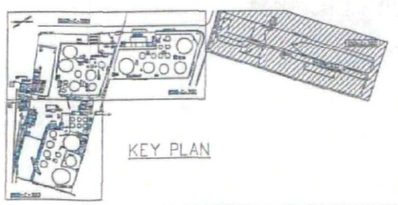
TITLE: TANK FARM 3
SITE DRAINAGE PLAN

DWG. No. 0608-C-7023 | SHEET 1 OF 1 | REV. No. G



LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- UNTREATED DRAINAGE
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003



KEY PLAN

DRAWING NO.	REFERENCE DRAWING
0608-C-7021	TANK FARM NO.1 GENERAL ARRANGEMENT

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENT	DAB	MK	WHB	03/06/97
B	GENERAL UPDATE	DAB	MK	WHB	03/26/97
C	REVISE STORM DRAINAGE LEGEND	DAB	MK	WHB	07/24/97
D	UPDATED FOR SWPCP	DAB	SM	WHB	02/12/98
E	ADDED AOV CONTROLS, REMOVED BARGE LOADING NOTE	DKB	WHB	WHB	03/14/03
F	UPDATED TITLEBLOCK	CEN	WHB	WHB	12/08/06

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ConocoPhillips Pipe Line Company
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DR. D.A.BYNUM	CONTRACTOR No.
DSGN. D.A.BYNUM	PROJECT NO. 25-31
CK. MK AP. KJP	DWG. SCALE AS SHOWN
DATE 03/18/97	PLOT SCALE

ALPHA ENGINEERS and CONSTRUCTORS, INC.
AEC PROJECT NUMBER 25-31

PORTLAND TERMINAL

TITLE: DOCK FACILITIES
SITE DRAINAGE PLAN

DWG. No. 0608-C-7020 SHEET 1 OF 1 REV. No. F

6.0 STORMWATER POLLUTION CONTROL PLAN IMPLEMENTATION

The Portland Terminal maintains records of the time, date, and details of any implementation of the SWPCP This information is maintained at the Portland Terminal Office.

6.1 Inspections and Repairs

ConocoPhillips personnel regularly inspect the terminal for malfunctions and deteriorations, operator errors, and/or discharges that may lead to or cause a release of oil from the terminal or into the stormwater system. They also conduct routine inspections of monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment.

In addition, personnel make regular inspections around all storage facilities looking for faulty or leaking equipment. Daily inspections of the stormwater drainage system will reveal any required maintenance to the stormwater system. Any necessary cleaning of, or repairs to, the stormwater system will be conducted as soon as practical.

6.2 Personnel Training

ConocoPhillips provides training for facility operators as required by the SWPCP. ConocoPhillips personnel who handle or who may come in contact with oil, undergo a basic training and education program which stresses pollution control. Employees who are assigned to areas where oil spills may occur or where oil is handled, stormwater pollution prevention and spill response procedures are thoroughly explained during on-the-job training sessions.

All employees are given detailed instructions in the maintenance and operation of all facilities which they are expected to operate. All new employees will work with other personnel until they are deemed qualified by their supervisor to work alone. Periodic meetings are held for all employees on duty, in order to keep them informed of any changes in procedure, equipment and regulations. Critical operating procedures are written, reviewed and updated by regional staff members. They are kept on file in the operator's office for future reference.

Training is essential for an efficient and safe operation and ensures rapid and effective response to emergency situations. Employees with responsibility for the operation and maintenance of the stormwater and process water systems will be provided the associated trained at least annually. These training sessions will also emphasize accident prevention, in order to minimize the potential for oil to enter the storm and process water systems and to safeguard human health and the

environment.

ConocoPhillips maintains a record of all training classes attended by their employees. This training documentation is kept on record at the terminal office for a minimum of three years.

6.3 Stormwater Contamination Records

Whenever there are any leaks, spills, or other instances at the facility which contaminates stormwater, a description of the occurrence shall be documented using the form provided in Figure 6-1. All records regarding stormwater contamination shall be maintained in this plan for a minimum of three years.

6.4 Written Records

ConocoPhillips will maintain copies of the maintenance, repair and inspection records for a minimum of three years from the date of action. The annual inspection and certification of the effectiveness of the SWPCP will be kept on record for at least three years, as well. Incidents involving product spills or leaks, which impacted or may have impacted stormwater runoff, will also, be documented in addition to a description of the corrective actions taken, any discharges to the Willamette River, and other relevant information.

6.5 General Management Plans

The Portland Terminal maintains a copy of all permits, documents, and other terminal plans listed under Section 3.4.

FIGURE 6-1
STORMWATER CONTAMINATION LOG

NAME OF FACILITY: Portland Terminal

1. Date: 3/23/95 Volume of product lost: Approximately 20 gallons
   Cause of stormwater contamination: The failure of the circulation pump pressure relief valve caused product (decant) to be released on the ground.
   Corrective action: Pump was shut down and sorbent pads were dispersed.
   Steps for preventing recurrence: Failed relief valve was replaced and an unnecessary valve were removed. This modification should relieve some weight on the relief valve, allowing the amount of stress on the valve to be reduced.

2. Date: 11/3/95 Volume of product lost: Approximately 5,500 gallons
   Cause of stormwater contamination: During tank circulation, the threaded pipe nipple of the pump relief valve broke off, opening a hole approximately 1/2" from which product was lost.
   Corrective action: Flow of product was halted, CET Environmental was called in to begin cleanup.
   Steps for preventing recurrence: Thermal relief bypass valve was immediately relocated. All unnecessary fittings and valves were removed from the pump area. Minimum, maximum, and normal operating pressures were established for this pump.

3. Date: 2/22/97 Volume of product lost: Approximately 11,600 gallons
   Cause of stormwater contamination: Tank-to-tank product transfer was not halted when product reached maximum fill; product overfilled tank and spilled into the tank yard.
   Corrective action: Product transfer was halted, fire department was called in for response. remediation commenced after site assessment.
   Steps for preventing recurrence: Redundant high level alarms were added to product tanks as an added safeguard for the operators. Procedures and policies were reviewed for possible revisions.

4. Date: 5/05/05 Volume of product lost: N/A
   Cause of stormwater contamination: A sample submitted to a lab for monthly oversight testing had an oil and gas result of 15.8 mg/l. The daily limit is 15.0 mg/l.
   Corrective action:
   Steps for preventing recurrence: Cause of the oil and grease contamination is unknown. An inspection of the tank farms, separator and all areas flowing to the separator indicate no impact present. The facility typically does a batch discharge. Procedures have been modified to require results of the most recent sampling be received prior to discharge.

5. Date: 2/01/07 Volume of product lost: N/A
Cause of stormwater contamination: A sample submitted to a lab for monthly oversight testing of ph in storm separator 004 resulted in a sample of 3.6 su. Later determined that Columbia Inspection Lab had mistakenly provided a sampling bottle with acid in it. An NOV issued was rescinded by DEQ after appeals by COP.
Corrective action:
Steps for preventing recurrence: Talked to Columbia Inspection for the need of clean bottles.

6. Date: 10/07 Volume of product lost: N/A
Cause of stormwater contamination: A sample submitted to a lab for monthly oversight testing of ph in storm separator 004 resulted in a sample of 9.94 su. Later determined that the elevated ph insulted from a bag of calcium carbonated left on the lip of 004 final box during a rain event. The contents of the separator were pumped to the sanitary sewer with permission from Eric De Berry. The benchmark for copper was slightly elevated for .01mg/L.
Corrective action:
Steps for preventing recurrence: Pressure washed area of calcium contamination.

7. Date: 1/08 Volume of product lost: N/A
Cause of stormwater contamination: A sample submitted to a lab for monthly oversight testing of oil and grease in storm separator 002 resulted in a sample of 10.4 mg/L. The contents of the separator were pumped to the sanitary sewer with permission from Eric De Berry.
Corrective action:
Steps for preventing recurrence: N/A.

8. Date: 4/08 Volume of product lost: N/A
Cause of stormwater contamination: A sample submitted to a lab for monthly oversight testing of oil and grease in storm separator 001 resulted in a sample of 12.5 mg/L. The contents of the separator were pumped to the sanitary sewer with permission from Eric De Berry.
Corrective action:
Steps for preventing recurrence: Cleaned and vacuumed separator box.

7.0 PLAN AMENDMENT

7.1 Annual Internal Review

The Northwest Area Supervisor will inspect the facility and review the contents of the combined SWPCP and ASPP annually prior to the onset of the rainfall season, as required by general NPDES permit 1200-Z. The purpose of the inspection is to identify non-stormwater activity, which discharges to the stormwater drainage system. The SWPCP and ASPP review will include evaluating whether adequate measures have been taken to reduce pollutant loading or whether additional controls are needed. This plan review will include consideration of any changes in terminal personnel, equipment, tank contents, controls and communications systems.

Particular attention will be paid to any modifications to facility design, construction, operation, or maintenance that will materially affect the facility's potential for the discharge of pollutants. This will include any modification to area drainage, tank farm drainage, process water handling, or equipment additions (i.e., new tanks, loading lanes). If modifications of this nature have been made, the SWPCP and ASPP will be reviewed and authorized by the Northwest Area Supervisor and recertified by a professional engineer. Changes to this plan which do not affect its intent, scope, or overall design may be made without recertification but should still be authorized by the Northwest Area Supervisor.

7.2 Annual Site Inspection and Certification Requirements

The NPDES permit conditions state that ConocoPhillips must inspect the facility and review and evaluate the SWPCP every year, beginning from the plan implementation date. The inspection must be signed and certified by the Northwest Area Supervisor. In addition, the certification must include a description of the method used to evaluate the facility for the presence of non-stormwater discharges. A description of non-stormwater discharges is provided in Section 9.1.

The annual inspection and plan review are intended to ensure that the terminal is in compliance with both the NPDES permit, the SWPCP and ASPP, and ensures that the plan accurately reflects the configuration and operation of the terminal. This facility is required to submit reporting incidents of noncompliance and the results of the periodic discharge monitoring events to the EPA and DEQ.

If ConocoPhillips cannot certify compliance with the NPDES permit and the SWPCP, DEQ must be notified. The notification shall:

1. Identify the type(s) and cause(s) of noncompliance
2. Describe the remedial actions necessary to achieve compliance
3. Describe the probability of meeting the next scheduled requirement

The notification must be signed and certified. Noncompliance notifications must be submitted at least annually. In addition, the plan must be amended whenever there is a change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for non-stormwater discharges into the stormwater drainage system. A statement of compliance by the Northwest Area Supervisor is provided at the front of this plan in Section 1.

8.0 SWPCP MONITORING PROGRAM AND REPORTING REQUIREMENTS

A monitoring program shall be developed and implemented for this facility as covered by the general permit. This program description shall be made available upon request of a representative of DEQ or BES.

8.1 Introduction

This terminal has developed and implemented a daily inspection and planned maintenance program to meet the inspection requirements detailed in the terminal's SPCC Plan and the SWPCP. The daily inspection and planned maintenance program will meet the following objectives in relation to the general permit requirements and the SWPCP:

- Ensure that stormwater discharge is in compliance with discharge prohibitions, effluent limitations, and receiving water limitations specified in the general permit;
- Ensure practices at the facility to control pollutants in stormwater discharges are evaluated and revised to meet changing conditions;
- Aid in the implementation of the combined SWPCP and ASPP;
- Measure the effectiveness of best management practices in removing pollutants in stormwater discharge.
- Meets the requirements of the Annual Site Inspection and Certification.

This program shall be amended, when necessary.

8.2 Monitoring Program

As described in Section 5.2, the terminal discharges stormwater to the municipal storm sewers on Kittridge and Doane Avenue from the three oil/water separators:

- Separator #001 located adjacent to Tank Farm 3
- Separator #002 located in Tank Farm 1
- Separator #004 located in Tank Farm 2

Monitoring of each stormwater system discharge is conducted for selected parameters and at various intervals as required under Schedule B of the 1200-Z permit. The monitoring requirements of the 1200-Z permit are as follows:

Parameter	Minimum Frequency	Type of Sample
Total Oil & Grease	Four times per year	Grab
Oil and Grease Sheen	Once per month (when discharging)	Visual
Floating Solids	Once per month (when discharging)	Visual
Flow	Daily when Discharging	Estimate
Total Copper	Four times per year	Grab
Total Lead	Four times per year	Grab
Total Zinc	Four times per year	Grab
pH	Four times per year	Grab
Total Suspended Solids	Four times per year	Grab

Each of the above monitoring requirements are discussed in greater detail below, including a description of sampling methods, sampling locations, analytical requirements, and special conditions which may affect the monitoring frequency. It is recognized that ConocoPhillips is allowed to and may collect additional data to supplement that described by the minimum frequency requirement above to further evaluate compliance. It is also recognized that any additional data colleted must be reported.

8.2.1 Total Oil and Grease

An oil and grease sample is required to be collected and evaluated at least four times per year. Grab samples must be representative of the discharge and must be taken at least 14 calendar days apart. Two samples must be collected before December 31st, and two samples must be collected after January 1st. The grab sample method should be used to obtain a representative discharge sample in an appropriate container as described in Section 10.2. The sample location is the last chamber of the final box of each oil/water separator just before the separator discharge outlet. These sampling locations are shown in Figure 8-1. The samples should be analyzed for total oil and grease by an EPA approved method under 40 CFR 136. The permit requires that the oil and grease concentration not exceed the following benchmark concentration:

Parameter	Benchmark
Total Oil and Grease	10 mg/L

8.2.2 Stormwater System Oil/Water Separator Visual Observations

Each oil/water separator and the entire stormwater system should be observed visually at lease once per month when discharging to check for floating solids and significant accumulations of oil in each separator, as well as any unusual conditions, malfunctions, or repairs that may be necessary. The separator discharge should also be checked or the presence of oil or sheens.

8.2.3 Flow - Revised after 2007 WW

The ~~rate of~~ discharge from each ~~oil/water~~ separator should be determined when discharges are occurring. Flow to each separator is currently determined using a relationship between the area draining each separator and rainfall. It is conservatively assumed that all stormwater which flows to a particular separator is eventually discharged. The relationships between rainfall and flow to each separator are described in the following conversion factors:

Separator Number	Discharge after 0.05" of rain	Discharge after 1" of rain
001	2305 ~~226~~ gal	4611 ~~4,518~~ gal
002	7191 ~~78~~ gal	14382 ~~1,515~~ gal
004	1464 ~~134~~ gal	2928 ~~2,684~~ gal

8.2.4 Total Copper, Lead and Zinc

Grab samples to evaluate for the presence of total copper, lead and zinc should be collected and evaluated at least four times per year. Grab samples must be representative of the discharge and must be taken at least 14 calendar days apart. Two samples must be collected before December 31st, and two samples must be collected after January 1st. The grab sample method should be used to obtain a representative discharge sample in an appropriate container as described in Section 10.2. The sample location is the last chamber of the final box of each oil/water separator just before the separator discharge outlet. These sampling locations are shown in Figure 8-1. The samples should be analyzed for total copper, lead and zinc by an EPA approved method under 40 CFR 136. The permit requires that the total copper, lead and zinc concentrations not exceed the following benchmark concentrations:

Parameter	Benchmark
Total Copper	0.1 mg/L
Total Lead	0.4 mg/L
Total Zinc	0.6 mg/L

8.2.5 pH

Grab samples to evaluate for pH should be collected and evaluated at least four times per year. Grab samples must be representative of the discharge and must be taken at least 14 calendar days apart. Two samples must be collected before December 31st, and two samples must be collected after January 1st. The grab sample method should be used to obtain a representative discharge sample in an appropriate container as described in Section 10.2. The sample location is the last chamber of the final box of each oil/water separator just before the separator discharge outlet. These sampling locations are shown in Figure 8-1. The samples should be analyzed for pH by an EPA approved method under 40 CFR 136. Evaluation for pH will involve laboratory samples as well as pH measurements collected in the field using a calibrated pH meter. Rainfall pH data will also be collected. The permit requires pH not exceed the following benchmark concentration:

Parameter	Benchmark
pH	5.5 – 9.0 SU

8.2.6 Total Suspended Solids

Grab samples to evaluate for total suspended solids should be collected and evaluated at least four times per year. Grab samples must be representative of the discharge and must be taken at least 14 calendar days apart. Two samples must be collected before December 31st, and two samples must be collected after January 1st. The grab sample method should be used to obtain a representative discharge sample in an appropriate container as described in Section 10.2. The sample location is the last chamber of the final box of each oil/water separator just before the separator discharge outlet. These sampling locations are shown in Figure 8-1. The samples should be analyzed for total suspended solids by an EPA approved method under 40 CFR 136. The permit requires total suspended solids not exceed the following benchmark concentration:

Parameter	Benchmark
Total Suspended Solids	130 mg/L

8.3 Sample and Monitoring Records and Reporting

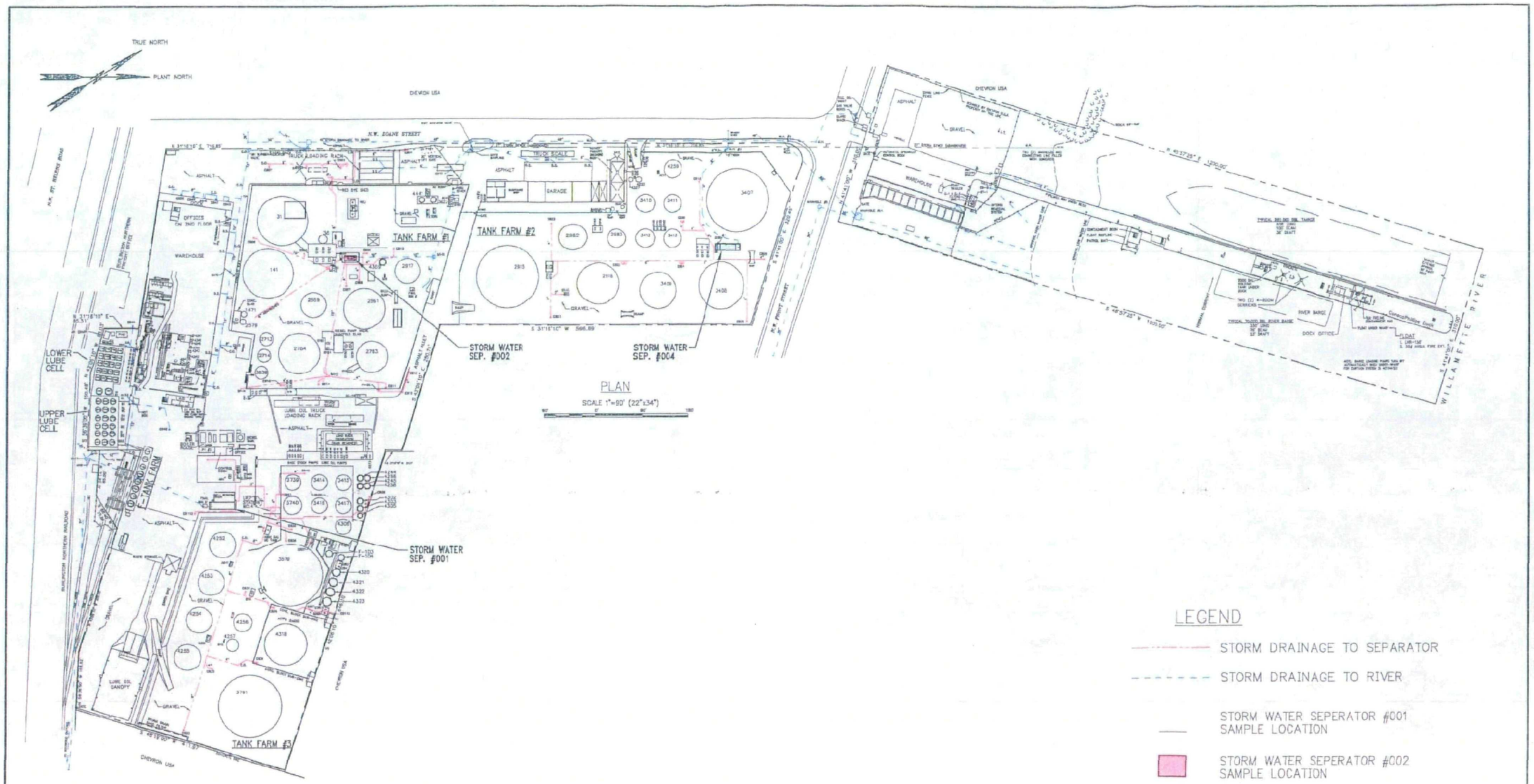
The Portland Terminal will retain copies of all stormwater sampling and monitoring information and reports required by NPDES Permit Number 1200-Z, for at least three years from the date of sample, observation, measurement and report. Included in these records are the analytical laboratory reports from the samples submitted for analysis of the parameters described in Section 8.2, as well as any additional data collected.

Results the monitoring activities (grab sampling and visual monitoring results) should be submitted to DEQ by July 31st of each for the previous monitoring period (i.e., July 1 through July 30). DEQ monitoring activities will be presented using approved discharge monitoring report (DMR) forms available from DEQ. Examples of the forms are provided in Attachment B.

The following information will be included in the DMR:

1. The date, exact place, time and methods of sampling or measurements
2. The individual(s) who performed the sampling or measurements
3. The date the analyses were performed
4. The individual(s) who performed the analyses
5. The analytical techniques and minimum detection limits used for each parameter
6. The results of such analyses

If results of stormwater monitoring activities indicate a benchmark concentration has been exceeded, DEQ will be contacted within 24 hours from the time sampling results were received. Additionally, the cause of the exceedance will be investigated within 30 calendar days of receiving the sampling results. The investigation will include a review the SWPCP and development of an Action Plan to correct the problem for DEQ approval as described in Schedule A of the 1200-Z permit.



PLAN
SCALE 1"=80' (22"x34")

LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- STORM WATER SEPERATOR #001 SAMPLE LOCATION
- STORM WATER SEPERATOR #002 SAMPLE LOCATION
- STORM WATER SEPERATOR #004 SAMPLE LOCATION

DRAWING NO.	REFERENCE DRAWINGS	REV. NO.	DATE	REVISED	DRAWN BY	CKD BY
0608-C-7020	DOCK FACILITIES GENERAL ARRANGEMENT	A	03/02/98	UPDATED FOR SWPCP	DAB	SM
0608-C-7021	TANK FARM NO.1 GENERAL ARRANGMENT	B	11/22/04	ADDED LUBE OIL CANOPY AND WASTE STORAGE	QKB	WHB
0608-C-7022	TANK FARM NO.2 GENERAL ARRANGEMENT					
0608-C-7023	TANK FARM NO.3 GENERAL ARRANGEMENT					

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DRAWN BY	D.A.BYNUM
CHKD BY	SM
APPD BY	SM
SCALE	AS SHOWN
DATE	03/02/98

PORTLAND TERMINAL
PORTLAND, OREGON
FIGURE 8-1
FACILITY SAMPLE LOCATIONS

DRAWING NO.	SHEET	REV.
0608-C-7011	1 OF 1	B

9.0 ASPP MONITORING PROGRAM AND REPORTING REQUIREMENTS

A monitoring and reporting program shall be developed and implemented for this facility as covered by the waste water discharge permit. This program description shall be made available upon request of a representative of DEQ or BES.

9.1 Introduction

This terminal has developed and implemented a daily inspection and planned maintenance program to meet the inspection requirements detailed in the terminal's ASPP and waste water discharge permit. The daily inspection and planned maintenance program will meet the following objectives in relation to the general permit requirements of the ASPP:

- Ensure that process water discharge is conducted in compliance with discharge limitations, monitoring and reporting requirements and general conditions specified in the waste water discharge permit,
- Ensure practices at the facility to control pollutants in process water discharges are evaluated and revised to meet changing conditions;
- Aid in the implementation of the combined SWPCP and ASPP;
- Measure the effectiveness of best management practices in removing pollutants in process water discharge.

This program shall be amended, when necessary.

9.2 Monitoring Program

As described in Section 5.2, the terminal discharges process water to the City of Portland's municipal sanitary sewer system from one oil/water separator:

- Separator #003 located in Tank Farm 1.

Monitoring of water system discharge is conducted for selected parameters and at quarterly intervals as required under Schedules A and B of Permit Number 400.181 The minimum

monitoring requirements of Permit Number 400.181 are as follows:

Parameter	Minimum Frequency	Type of Sample
Total Oil & Grease	Four times per year	Grab
pH	Four times per year	Grab

Each of the above monitoring requirements are discussed in greater detail below, including a description of sampling methods, sampling locations, analytical requirements, and special conditions which may affect the monitoring frequency. As with stormwater monitoring, it is recognized that ConocoPhillips is allowed to and may collect additional data to supplement that described by the minimum frequency requirement above to further evaluate compliance. It is also recognized that any additional data colleted must be reported.

Total Oil and Grease

An oil and grease sample is required to be collected and evaluated at least four times per year. Grab samples must be representative of the discharge and must be collected on a quarterly basis during March, June, September and December. The grab sample method should be used to obtain a representative discharge sample in an appropriate container as described in Section 10.2. The sample location is the last chamber of the final box of the process stream oil/water separator, before the separator discharge outlet. These sampling locations are shown in Figure 9-1. The samples should be analyzed for total oil and grease by an EPA approved method under 40 CFR 136. The permit requires that the oil and grease concentration not exceed the following limitation:

Parameter	Benchmark
Non-polar Oil and Grease	110 mg/L

Process Water System Oil/Water Separator Visual Observations

The water oil/water separator should be observed visually at lease once per month when discharging to check for floating solids and significant accumulations of product, as well as any unusual conditions, malfunctions, or repairs that may be necessary. Product accumulating on the surface of the process water separator should be periodically skimmed and recovered.

Flow

The rate of discharge from the process water oil/water separator should be gauged and the discharge volume recorded. Records of gauge readings and discharge volumes should be

maintained on the storm and process water inspection sheets.

pH

Grab samples to evaluate for pH should be collected and evaluated at least four times per year. Grab samples must be representative of the discharge and must be collected on a quarterly basis during March, June, September and December. The grab sample method should be used to obtain a representative discharge sample in an appropriate container as described in Section 10.2. The sample location is the last chamber of the final box of the process water oil/water separator, before the separator discharge outlet. The sampling location is shown in Figure 9-1. The samples should be analyzed for pH by an EPA approved method under 40 CFR 136. Evaluation for pH will involve laboratory samples as well as pH measurements collected in the field using a calibrated pH meter. The permit requires pH not exceed the following limitation.:

Parameter	Benchmark
pH	5.0 – 11.5 SU

9.3 Sample and Monitoring Records and Reporting

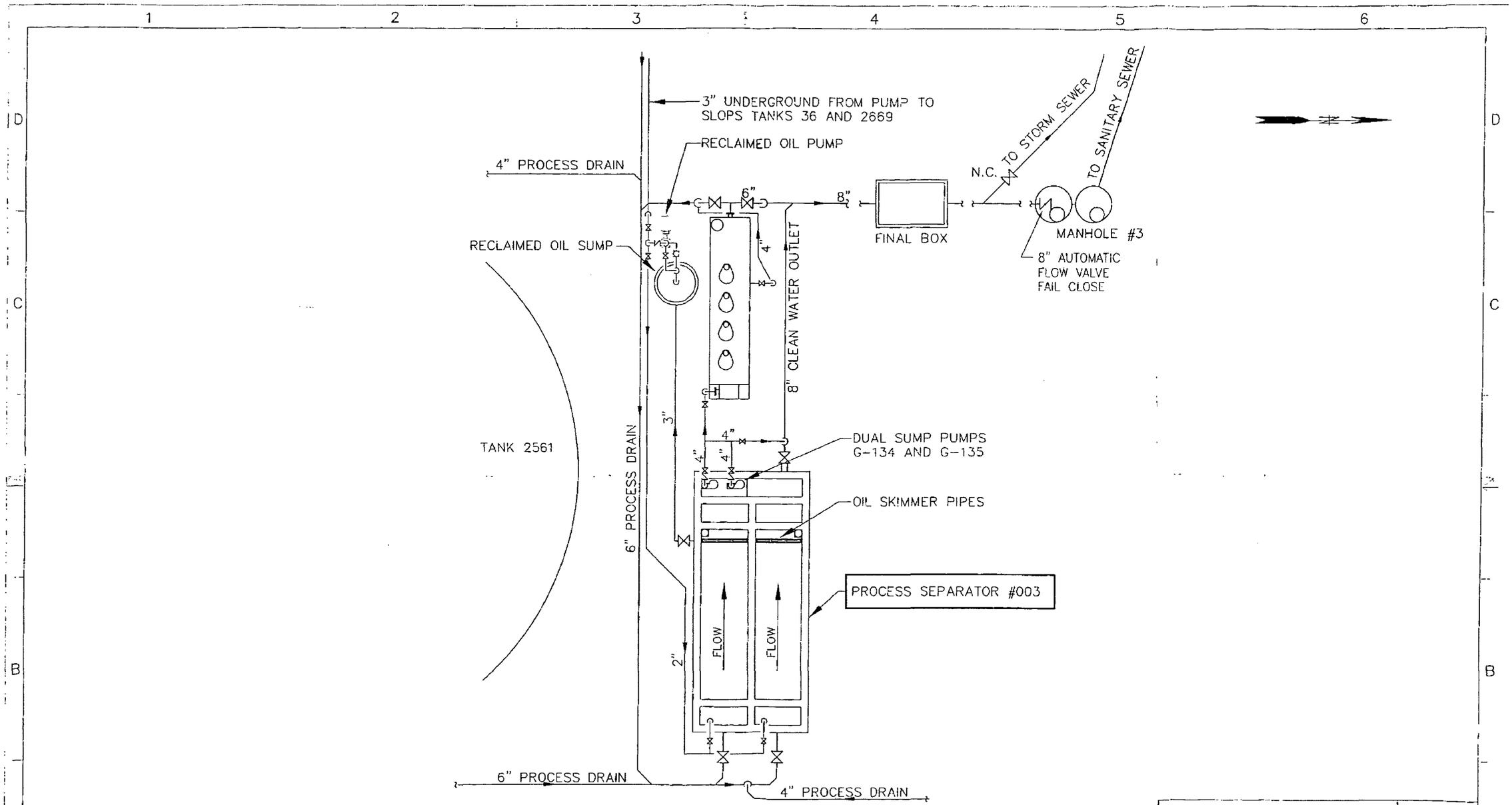
The Portland Terminal will retain copies of all process water sampling and monitoring information and reports required by Permit Number 400.181, for at least three years from the date of sample, observation, measurement and report. Included in these records are the analytical laboratory reports from the samples submitted for analysis of the parameters described in Section 9.2, as well as any additional data collected.

Results the monitoring activities should be submitted to BES by the 15th of the month following the conclusion of the reporting period (i.e., April 15th, July 15th, October 15th and January 15th). BES monitoring activities will be presented using the self monitoring report form approved by BES. Examples of the forms are provided in Attachment B.

The following information will be included in the self montoring reoprt:

- The date, exact place, time and methods of sampling or measurements
- The individual(s) who performed the sampling or measurements
- The date the analyses were performed
- The individual(s) who performed the analyses
- The analytical techniques and minimum detection limits used for each parameter
- The results of such analyses

If results of process water monitoring activities indicate a limitation has been exceeded, BES will be contacted within 24 hours from the time sampling results were received. Additionally, the cause of the exceedance will be investigated within 30 calendar days of receiving the sampling results. A report describing the investigation will be submitted to BES within 30 calendar days of receiving the sampling results. The investigation will include a review the combined SWPCP and ASPP and development of a plan to correct the problem for BES approval.



DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
		A	FOR REVIEW & COMMENT	ALM	WHB		04/24/07

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

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ConocoPhillips Pipe Line Company
5528 NW DOANE ST.
PORTLAND, OREGON 97210

DR. AL MANN	CONTRACTOR No.
DSGN. W.H.BISHOP	PROJECT NO. 29-72
CK. WHB AP.	DWG. SCALE 1/2"=1'0"
DATE 04/24/07	PLOT SCALE

ALPHA ENGINEERS and CONSTRUCTORS, INC.
3929 NE 78TH AVENUE, PORTLAND, OR 97210 Tel(503)227-3317/Fax(503)227-3344

AECI PROJECT NUMBER 25-87

PORTLAND TERMINAL

TITLE: PROCESS SEPARATOR #003

DWG. No. PORT-CC-1101 SHEET 1 OF 1 REV. No. A

10

10.0 SWPCP AND ASPP MONITORING PROCEDURE

10.1 Visual Inspection of Storm Drain System

Visual inspections during dry and wet weather are important components of the Northwest Area Supervisor's periodic site inspection and annual certification. A visual inspection of the system conducted during dry weather can be an effective method of locating non-stormwater discharges to the storm drain system. The observation should be made during normal business hours when sources of non-stormwater are typically active. Records are kept of all observed flows and any stains, sludges, and other abnormal conditions. Where flows to the stormwater are observed, additional analysis may be necessary to identify the source of the flows.

Visual inspections during storm events can also be effective in evaluating the operation and effectiveness of the system. Catch basins should be observed to ensure they are draining properly and are not clogged or restricted causing flow to back up in the pipes. The lift stations and oil/water separators can be checked for proper operation and each final box can be observed for sheens or visible signs of contamination prior to discharge. The separators should be checked for the accumulation of oil, sediment, or debris.

10.2 Collecting Stormwater Discharge Samples

This section provides guidance for collecting grab samples and identifying the constituents or parameters that must be monitored. ConocoPhillips personnel shall collect storm and waste water discharge sampleing as described in Sections 8 and 9. If additional samples are taken, the results must be reported and maintained in the terminal files for at least three years. The discharge flow rate can be estimated as discussed in Section 8.2 for the stormwater separators or using the meter installed on discharge piping from Separator 003 for the process water system.

10.2.1 Grab Samples

The grab samples collected should be large enough for all the laboratory analyses to be performed, but must be at least 100 milliliters (ml). Grab samples are typically collected by filling the sample container just below the water surface in the final box of the oil/water separator. The grab sample should be collected from near the center of the chamber.

All samples must be properly handled (i.e., proper holding time before analysis, storage

temperature, preservation method) and analyzed by the methods contained in 40 CFR Part 136. Certified commercial laboratories are familiar with these requirements and can provide information on proper handling procedures.

Quality assurance/quality control (QA/QC) methods must be implemented in the field by the personnel conducting the sampling and in the laboratory to ensure the accuracy and validity of the laboratory results. The laboratories will also typically report the results on their internal QA/QC to ConocoPhillips on request.

10.2.2 Reporting

All sampling data obtained must be reported as concentrations or as total mass. Use the following abbreviations in the columns headed "Units:"

lbs = pounds
mg = milligrams
kg = kilograms
ppm = parts per million
mg/L = milligrams per liter

11.0 EMERGENCY RESPONSE PROCEDURES

11.1 Fire Emergency Procedures

In case of fire, the following procedure shall be followed:

1. Activate the fire alarm.
2. Call 911.
3. Shutdown flow of product if you can do so safely. If the fire is at the marine dock, cease all transfers and close shore valves if you can do so safely.
4. If personnel health and safety is not compromised:
   a. Activate the fixed fire suppression system(s), if applicable;
   b. For small fires, contain the fire with a fire extinguisher if it can be done safely. If the fire cannot be contained after using one fire extinguisher, do not attempt to extinguish the fire any further. Retreat and evacuate to a designated assembly area upwind of the fire.
5. Evacuate to a designated assembly area. Stay upwind of the fire; do not walk into the smoke.
6. Contact the Northwest Area Supervisor.
7. Await further instructions from your supervisor or incident commander.
8. Contact surrounding businesses.

11.2 Fire Fighting Equipment Procedures

The Terminal is equipped with a fixed foam system, portable light water, and water extinguishing agents.

Instructions for the use of fire extinguishers at the ConocoPhillips Portland Terminal are as follows:

1. Hold extinguisher upright and pull ring pin;
2. Stand approximately 10 feet away from the base of the fire;
3. Aim extinguisher nozzle at the base of the fire; and
4. Squeeze lever and sweep the nozzle from side to side

11.3 Evacuation

In the event that an emergency evacuation is necessary, terminal personnel shall exit the terminal office, tank farms, or marine dock and head to the designated assembly locations shown in the evacuation route map figure 10-1. If the entire area must be evacuated, personnel should proceed north on Doane Avenue, to Front Avenue. Depending on the wind direction, the Kinder Morgan Willbridge Terminal or LaQuinta Inn on Yeon Avenue have been identified as potential off-site assembly areas. Based on the specific needs of the incident and announced to personnel using radios and/or messengers. ConocoPhillips personnel shall not leave the assembly areas until instructed to do so.

In the unlikely event that non-ConocoPhillips personnel in the area surrounding the terminal must be evacuated, ConocoPhillips will defer to the local fire department for implementing such an evacuation. The decision to evacuate the surrounding area and the determination of the area(s) to be evacuated will be made by the local fire department.

11.4 General Spill Response Procedures

When a spill is observed in the facility, an emergency will immediately be declared. The employee making the observation will contact the Emergency Response Contractor, who will follow the procedures outlined in the facility Emergency Response Plan. The following procedures will be followed when responding to spills in general, as well as those at the loading racks, unloading stations, tank farms, pipeline manifolds and receiving tank, and the marine dock.

If a spill accumulates in the oil/water separators, isolate the separator and follow notification procedures outlined in the facility Emergency Response Plan.

1. Respond only if it is safe, if you are qualified, if you have received the appropriate training, and if you have considered the need for air monitoring, selection of appropriate PPE, flammable atmosphere testing, benzene exposure monitoring, and other health and safety concerns. Specific procedures will depend on the incident.
2. Stop the flow of material if it can be done immediately and without risking personal health and safety. If the release cannot be stopped safely, do not attempt to do so, and withdraw to a safe position upwind or upgradient of the release.
3. Make an immediate assessment of the situation including the following:

- Are you or is anyone in immediate danger?
- What product and how much was spilled?
- Can the spilled material enter the water or migrate off site?
- Consider that your assessment will determine the approach you and others will take in the remaining steps.

4. Notify the Northwest Area Supervisor and others for assistance in necessary.
5. If your safety is threatened, retreat upwind and upgradient from the spill, and do not walk or drive through spilled material or any cloud vapors.

11.5 Loading Racks and Unloading Stations Spill Response Procedures

Qualified personnel with the appropriate PPE should take the following steps in the event of a spill at one of the loading racks or unloading stations:

NEVER ATTEMPT TO ENTER AN AREA ALONE IN AN EMERGENCY SITUATION

1. Shut off the source of the spill, and request other loading operations to do the same.
2. Do not allow vehicles in the area to start their engines and keep other vehicles out of the area.
3. Do not walk or drive through the spill or a vapor cloud.
4. Keep vehicles out of the area and block off Doane Avenue.
5. Consider the need for air monitoring, selection of appropriate PPE, flammable atmosphere testing, benzene exposure monitoring, and other health and safety concerns.
6. Notify the Northwest Area Supervisor, Coordinator of Operations, Head Operator, Qualified Individual or other supervisory personnel, and office personnel of the spill, and ask if you can proceed to the next step.
7. Wash down the area into the yard drains. Wash down the vehicles involved in the spill as appropriate, using proper procedures and appropriate PPE.
8. Vapor test the area before allowing engines and pumps to start up again.
9. Contact the Northwest Area Supervisor or supervisory personnel for permission to resume operations and to arrange for waste disposal, as necessary.

11.6 Tank Farm Spill Response Procedures

Qualified personnel with appropriate PPE should take the following general steps in the event of a spill in the tank farm areas:

NEVER ATTEMPT TO ENTER AN AREA ALONE IN AN EMERGENCY SITUATION

1. Test atmosphere for flammable or hazardous vapors (vapor clouds); if present, evacuate area immediately; DO NOT USE ANY ELECTRICAL SWITCHES IF FLAMMABLE OR HAZARDOUS VAPORS ARE PRESENT.
2. Shut off the source, and turn off all pumps and electrical devices that may be ignition sources in the area.
3. Close base valves on all tanks in the area if it can be done safely.
4. Do not drive or walk through spilled product.
5. Notify the Northwest Area Supervisor and office personnel, advise them of the location and extent of the spill, and instruct them to notify the fire department by calling 911 and the appropriate regulatory agencies if the spill is large and/or involves gasoline. Do not enter the spill area without an observer nearby.
6. Consider the need for air monitoring, selection of appropriate PPE, flammable atmosphere testing, benzene exposure monitoring, and other health and safety concerns.
7. Get assistance and establish traffic control along Doane and Front Avenue.
8. Obtain respirator(s) and bring them into the area. Do not stay in the area without a respirator if vapors are evident. Only use a respirator if you are qualified to do so.
9. Make sure the tank farm sump pumps are de-energized.
10. Place the foam system on standby.
11. Notify neighboring facilities that may present sources of ignition as appropriate.
12. If the spill is a result of overfilling a tank, the product should be transferred from the overfilled tank to another like product tank, if possible, to lower the product to a prescribed level.
13. Be certain that the area is free of any spilled product and/or fumes before normal operations are continued in the area.
14. Do not resume operations in the area until the Northwest Area Supervisor, Coordinator of Operations, Head Operator, Qualified Individual, or designee grants approval.

11.7 Pipeline Manifolds and Receiving Tank Spill Response Procedures

If a spill occurs at a pipeline manifold or at the receiving tank during a product receipt, the following steps should be taken:

NEVER ATTEMPT TO ENTER AN AREA ALONE IN AN EMERGENCY SITUATION

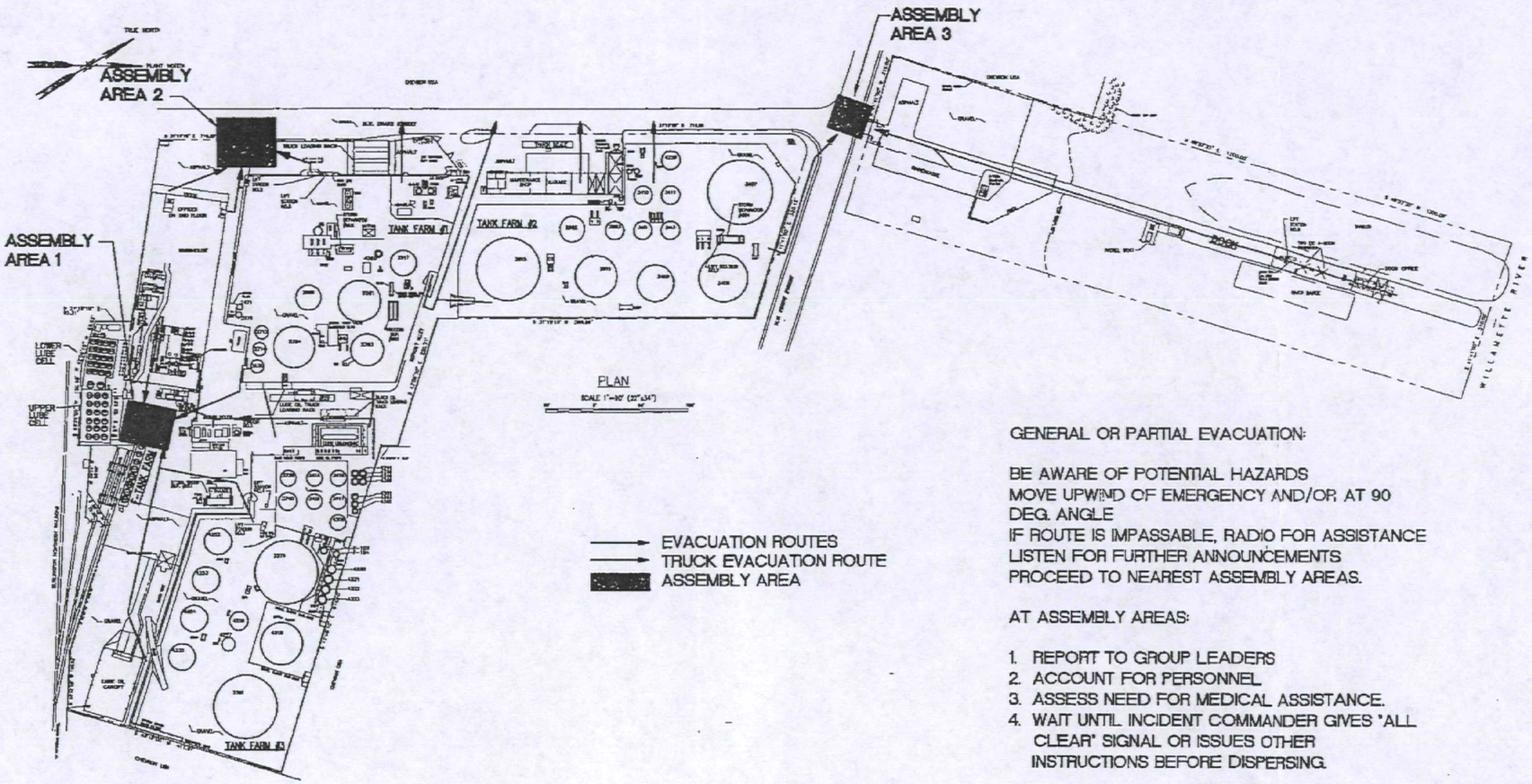
1. Call the Olympic Pipeline operator at (425) 235-7721, Chevron operator at (503) 221-7866, Kinder Morgan Pipeline operator at (503) 224-3390 or Kinder Morgan Terminal operator at (503) 220-1246 and request an emergency shutdown.
2. Define "Hot Zone" and test atmosphere for hazardous/flammable vapors.
3. Close the base valves at the receiving tank after pumping is stopped.
4. Turn off the pumps and electrical devices in the area.
5. Notify the office personnel, advise them of the location and extent of the spill, and request assistance. Do not enter the spill area without an observer nearby.
6. Obtain respirator(s) and bring them into the area. Do not stay in the area without respirator equipment if vapors are evident. Only use respirators if you are qualified to do so.
7. Advise the fire department of the spill location.
8. Make sure the tank farm sump pumps are de-energized.
9. Place the foam system on standby.
10. If the spill results from a line, pump, or valve rupture, a thorough inspection is required following repairs and before product movement may resume.

11.8 Marine Dock Spill Response Procedures

Qualified personnel with the appropriate PPE must take the following general steps immediately any time there is a spill of petroleum product at the dock causing product to enter the water (refer to the facility's Emergency Response Plan for additional details):

NEVER ATTEMPT TO ENTER AN AREA ALONE IN AN EMERGENCY SITUATION

1. Close the header valves on the vessel and the dock. Shut off all electrical equipment and devices.
2. If a hose ruptured, position the break over the manifold containment, if possible. If not, place a tub under the hose at the break.
3. Notify the U.S. Coast Guard, National Response Center, ODEQ, and other regulatory agencies, emergency services, or local authorities as necessary. Advise personnel as to the type of the product spilled, the approximate amount, and the location.
4. If the spill cannot be recovered by using absorbent pads or strips, the response boat should be launched and the floating containment boom placed to contain the spill. DO NOT LAUNCH THE BOAT OR START MOTORS OR ELECTRICAL EQUIPMENT IF THE SPILL IS GASOLINE.
5. If assistance in containing the spill is needed, call Clean Rivers Cooperative for supplemental spill response equipment and personnel.
6. Do not allow unauthorized vessels or other motorized equipment in the spill area.
7. Alert other nearby operators so they can shut down if necessary.



GENERAL OR PARTIAL EVACUATION:

BE AWARE OF POTENTIAL HAZARDS
MOVE UPWIND OF EMERGENCY AND/OR AT 90 DEG. ANGLE
IF ROUTE IS IMPASSABLE, RADIO FOR ASSISTANCE
LISTEN FOR FURTHER ANNOUNCEMENTS
PROCEED TO NEAREST ASSEMBLY AREAS.

AT ASSEMBLY AREAS:

1. REPORT TO GROUP LEADERS
2. ACCOUNT FOR PERSONNEL
3. ASSESS NEED FOR MEDICAL ASSISTANCE.
4. WAIT UNTIL INCIDENT COMMANDER GIVES "ALL CLEAR" SIGNAL OR ISSUES OTHER INSTRUCTIONS BEFORE DISPERSING.

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
		0	FOR INFORMATION ONLY	DAB	KJP		08/28/97
		1	REVISED LOGO	DKB	TMB		01/20/02
		2	REMOVED ASSEMBLY AREA 3, RENAMED 4	DKB	TMB		01/20/02
		3	REMOVED TRUCK ASSEMBLE AREAS	DKB	TMB		04/02/02
		4	REMOVED TKS 31 & 141, GENERAL REVISION	DAB	TMB		01/16/07

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE AVE
PORTLAND OREGON

DR. D.A.BYNUM	CONTRACTOR No.
DSGN. D.A.BYNUM	PROJECT NO. 25-31
CK. KJP AP. MK	DWG. SCALE AS SHOWN
DATE 08/28/97	PLOT SCALE

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29th AVE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3144
ACC PROJECT NUMBER: 25-31

PORTLAND TERMINAL

TITLE: EVACUATION ROUTES AND ASSEMBLY AREAS

DWG. No. 0808-C-1202 | SHEET 1 OF 1 | REV. No. 4

12.0 RESPONSE TRAINING REQUIREMENTS

Experienced well-trained people are essential to successfully implement a spill response operation and conduct terminal operations in a manner which minimizes the changes of a spill. Besides regular classroom instruction and field exercises, drills are necessary to provide additional experience and verify the effectiveness of previous training. ConocoPhillips's policy requires that training and drill performance at all levels meet or exceed state and federal standards.

ConocoPhillips response personnel may also participate in oil spill drills organized by state and federal authorities and response contractors. For each announced or unannounced drill initiated by someone other than ConocoPhillips, participation will be optional unless mandated by the requirements of OAR 340-47-200(3), 33 CFR 154, and/or 40 CFR 112.

12.1 HAZWOPER Training Requirements

Regulations governing Hazardous Waste Operations and Emergency Response (HAZWOPER) mandated by the Oregon Occupational Safety and Health Administration and the Occupational Safety and Health Act (OSHA) set minimum training and competency requirements for personnel involved in response to oil spills. The HAZWOPER training requirements for emergency response are essentially the same for both the state (OAR 437-002-0101) and federal (29 CFR 1910.120) acts and are based on various levels of emergency spill response recognized by the hazardous materials handling industry.

In general, personnel involved in protection and containment operations, which do not involve contact with the spill (i.e., booming operations prior to arrival of the oil) must have at least 8 hours of HAZWOPER training or sufficient experience to demonstrate competency in their spill response duties. Personnel involved in more aggressive activities, such as source control, on-site containment, recovery, and cleanup, etc. (i.e., activities that could result in direct oil contact), must have a minimum of 24 hours of training.

The point where a response changes from an emergency situation to a post-emergency situation is determined by the state or federal On-Scene Coordinator. It is typically associated with the transition from containment, recovery, and protection activities to cleanup operations. In many cases, however, it is still considered an emergency until cleanup is completed and restoration operations, if required, are initiated.

The state and federal regulations require all response personnel involved in post-emergency operations (clean-up or restoration) to complete 40 hours of HAZWOPER training unless there is not a significant health risk to the workers, in which case OSHA only requires 4 hours of training. For oil spills, the health hazard is no longer considered significant when the majority of volatile constituents have evaporated and the exposure of any of the toxic components and/or the oil itself is less than 50 percent of the permissible exposure limit (PEL).

The training criteria for individuals who may be involved in spill incident are based on the duties and functions associated with the level of response or types of activities they may have to perform.

GENERAL PERMIT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
STORMWATER DISCHARGE PERMIT
Department of Environmental Quality
811 S.W. Sixth Avenue, Portland, OR 97204
Telephone: (503) 229-5630 or 1-800-452-4011 toll free in Oregon
Issued pursuant to ORS 468B.050 and The Federal Clean Water Act

ISSUED TO:

SOURCES THAT ARE REQUIRED TO OBTAIN COVERAGE UNDER THIS PERMIT

Pursuant to 40 Code of Federal Regulation (CFR) §122.26(b)(14)(i - ix, xi) and OAR 340-045-0033(5), facilities identified in *Table 1: Sources Covered* on p. 3 below that may discharge stormwater from a point source to surface waters or to conveyance systems that discharge to surface waters. These facilities must complete the application and registration procedures to obtain coverage under the permit; see *Permit Coverage and Exclusion from Coverage* on p. 5 below.

Note:
1) Facilities may apply for conditional exclusion from the requirement to register for coverage under this permit if there is no exposure of industrial activities and materials to stormwater pursuant to 40 CFR §122.26(g); see *Permit Coverage and Exclusion from Coverage* on p. 5 below.

2) Sources meeting the description above, but that are excluded from this permit include: (i) Construction activities, asphalt mix batch plants, concrete batch plants and Standard Industrial Classification code 14, *Mining and Quarrying of Nonmetallic Minerals, Except Fuels*. These activities are regulated under separate general permits; and (ii) any source that has obtained a individual NPDES permit for the discharge.

Date: August 23, 2006

Lauri Aunan , Administrator
Water Quality Division

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permit registrant is authorized to construct, install, modify, or operate stormwater treatment or control facilities, and to discharge stormwater to public waters in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

Unless specifically authorized by this permit, by regulation issued by EPA, by another NPDES or WPCF permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including discharges to an underground injection control system.

Schedule F contains General Conditions that are included in all general permits issued by DEQ. Should conflicts arise between Schedule F and any other schedule of the permit, the requirements in Schedule F will not apply.

TABLE 1: SOURCES COVERED **Types of Industrial Sources required to obtain coverage under this permit.**
Facilities with the following primary Standard Industrial Classification (SIC) codes: 10 Metal Mining 12 Coal Mining 13 Oil and Gas Extraction 20 Food and Kindred Products 21 Tobacco Products 22 Textile Mill Products 23 Apparel and Other Finished Products Made From Fabrics and Similar Material 24 Lumber and Wood Products, Except Furniture and 2491 Wood Preserving. (Activities with SIC 2411 Logging that are defined in 40 CFR §122.27 as silvicultural point source discharges are covered by this permit.) 25 Furniture and Fixtures 26 Paper and Allied Products 27 Printing, Publishing and Allied Industries 28 Chemicals and Allied Products (excluding 2874 Phosphate Fertilizer Manufacturing) 29 Petroleum Refining and Related Industries 30 Rubber and Miscellaneous Plastics Products 31 Leather and Leather Products 32 Stone, Clay, Glass, and Concrete Products 33 Primary Metal Industries 34 Fabricated Metal Products, Except Machinery and Transportation Equipment 35 Industrial and Commercial Machinery and Computer Equipment 36 Electronic and Other Electrical Equipment and Components, Except Computer Equipment 37 Transportation Equipment 38 Measuring, Analyzing, and Controlling Instruments; Photographic, Medical and Optical Goods; Watches and Clocks 39 Miscellaneous Manufacturing Industries 4221 Farm Product Warehousing and Storage 4222 Refrigerated Warehousing and Storage 4225 General Warehousing and Storage 5015 Motor Vehicle Parts, Used 5093 Scrap and Waste Materials
Facilities with the following primary SIC codes that have vehicle maintenance shops (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations: 40 Railroad Transportation 41 Local and Suburban Transit and Interurban Highway Passenger Transportation 42 Motor Freight Transportation and Warehousing (excluding 4221 Farm Product Warehousing and Storage, 4222 Refrigerated Warehousing and Storage, and 4225 General Warehousing and Storage) 43 United States Postal Service 44 Water Transportation 45 Transportation by Air 5171 Petroleum Bulk Stations and Terminals, except as provided in Note 1 below.
Facilities storing, transferring, formulating, or packaging bulk petroleum products or vegetable oils, except as provided in Note 1 below.
Steam Electric Power Generation including coal handling sites
Landfills, land application sites and open dumps (excluding landfills regulated by 40 CFR §445 that discharge "contaminated stormwater" (as defined by 40 CFR §445.2) to waters of the U.S.)
Hazardous Waste Treatment, Storage and Disposal Facilities [excluding hazardous waste landfills regulated by 40 CFR §445 that discharge "contaminated stormwater" (as defined by 40 CFR §445.2) to waters of the U.S.]

TABLE 1: SOURCES COVERED
Types of Industrial Sources required to obtain coverage under this permit.
Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, recycling, and reclamation of municipal or domestic sewage (including land dedicated to the disposal of sewage sludge that are located within the confines of the facility) with the design flow capacity of 1.0 mgd or more, or required to have a pretreatment program under 40 CFR §403.

Note 1:
Permit registration is not required for a facility covered in Table 1 if discharges are only from:

a) Stormwater that contacts oil-filled electrical equipment in transformer substations that are equipped with properly functioning oil spill prevention measures such as containment areas or oil/water separators.
b) Stormwater that contacts petroleum product receiving or dispensing areas or product dispensing equipment from which product is dispensed to final users, whether or not the stormwater is treated by an oil/water separator.
c) Stormwater that collects in a secondary containment area at a petroleum product dispensing site, where the secondary containment area is associated with storage tanks from which product is dispensed only to final users, and the discharge from the containment area is treated by an oil/water separator.
d) Stormwater that collects in a secondary containment area at a bulk petroleum product storage site, where the total storage capacity at the site does not exceed 150,000 gallons, and the discharge from the containment area is treated by an oil/water separator. A site with multiple containment areas is considered a single site for determining total storage capacity.

PERMIT COVERAGE AND EXCLUSION FROM COVERAGE

1) **New Application for Permit Coverage**
   a) An owner or operator of a new facility or existing facility that is required to be covered under this permit must:
      i) *New facility* - Submit a complete application, which includes a department-approved application form; a Stormwater Pollution Control Plan (SWPCP); and applicable permit fees, to the department or agent at least 60 calendar days before the planned activity that requires permit coverage, unless otherwise approved by the department or agent (see Schedule D for description of agent). If an agent is receiving the application materials, submit two copies of the SWPCP.
      ii) *Existing facility operating without coverage under the permit* - Submit a complete application, which includes a department-approved application form; a SWPCP; and applicable permit fees, to the department or agent immediately. If an agent is receiving the application materials, submit two copies of the SWPCP.
      iii) *Existing facility operating under permit coverage that intends to change industrial processes* - Submit a complete application, which includes a department-approved application form; a SWPCP; and applicable permit fees, to the department or agent at least 60 calendar days before the planned change, unless otherwise approved by the department or agent. If an agent is receiving the application materials, submit two copies of the SWPCP.
   b) Public Review Period on new application and SWPCP*
      i) The application form and SWPCP are subject to a 14-calendar day public review period before permit registration is granted by the department.
      ii) The public review period will not begin if the application form or SWPCP are incomplete.
   c) Registration
      i) The department or agent will notify the applicant in writing if registration is approved or denied. Permit coverage does not begin until the applicant receives written notice from the department or agent that the registration is approved.
      ii) If registration is denied or the applicant does not wish to be regulated by this permit, the applicant may apply for an individual permit in accordance with OAR 340-045-0030.

2) **Renewal Application for Permit Coverage**
   a) An owner or operator of a facility registered under the 1200-Z permit that expires on June 30, 2007 must submit a complete renewal application, which includes a department-approved renewal application form; an updated SWPCP, if revisions to the SWPCP are necessary to address changed conditions or meet new permit requirements of this permit; and applicable permit fees, to the department or agent by January 30, 2007 to ensure uninterrupted permit coverage for industrial stormwater discharges. If an updated SWPCP is not submitted, the department will use the existing SWPCP for public notice purposes.
   b) Public Review Period on renewal application and SWPCP*
      i) The renewal application and SWPCP are subject to a 14-calendar day public review period before permit coverage may be renewed by the department or agent.
      ii) The public review period will not begin if the renewal application or SWPCP are incomplete.
   c) Registration
      i) The department or agent will notify the applicant in writing if registration is approved or denied.
      ii) If registration is denied or the applicant does not wish to be regulated by this permit, the applicant may apply for an individual permit in accordance with OAR 340-045-0030.

* The public review period described in conditions 1.b and 2.b above do not apply to registration applications and accompanying SWPCPs for new or existing facilities that were subject to public notice and comment requirements prior to July 1, 2007.

3. **Name Change or Transfer of Permit Coverage**
   a) For a name change or transfer of permit coverage between legal entities with no industrial process changes at the site, the owner or operator must submit a complete copy of the department-approved Name Change or Permit Transfer application form; an updated SWPCP, if revisions are necessary to address changed conditions, and applicable fees to the department or agent within 30 calendar days of the name change or planned transfer. If submittal is made to the agent, two copies of the SWPCP are required.
   b) The department or agent will notify the applicant in writing if the transfer is approved or denied. The department will transfer coverage under the permit after the department approves the application.
   c) For a name change or transfer of permit coverage between legal entities that intend to change industrial processes, the owner or operator must submit a new application for coverage under this permit as required in condition 1.a.iii above.

4) **"No Exposure" Conditional Exclusion from Permit Coverage**
   a) An owner or operator that applies for a "no exposure" conditional exclusion from coverage under this permit must:
      i) Provide a storm resistant shelter to protect industrial materials and activities from exposure to rain, snow, snow melt, and runoff, except as provided in the Environmental Protection Agency (EPA) *Guidance Manual for Conditional Exclusion from Stormwater Permitting Based on "No Exposure" of Industrial Activities to Stormwater* (EPA 833-B-00-001, June 2000). Storm resistant shelters with unsealed zinc or copper roofing materials are not eligible for the "no exposure" conditional exclusion.
      ii) Ensure that contaminated soil or materials from previous operations is not exposed.
      iii) Complete and sign a certification, on a form approved by the department, that there is no stormwater exposure to industrial materials and activities from the entire facility, except as provided in 40 CFR §122.26(g)(2). The EPA *Guidance Manual* (EPA 833-B-00-001) may be used to determine whether the no exposure criteria are met.
      iv) Submit the signed certification to the department or agent once every five years. If the department or agent does not comment on the "no exposure" certification within 30 days, the "no exposure" conditional exclusion is deemed approved. The department or agent may notify the applicant in writing or by email of its approval. The owner or operator must keep a copy of the certification on site and any notification of approval on site.
      v) Allow the department or agent to inspect the facility to determine compliance with the "no exposure" conditions, and allow the department or agent to make any "no exposure" inspection reports available to the public upon request.
      vi) Submit a copy of the "no exposure" certification to the municipal separate storm sewer system (MS4) operator (i.e., local municipality, district), upon their request, if facility discharges through an MS4; and allow inspection and public reporting by the MS4 operator.
   b) Limitations for obtaining or maintaining the exclusion:
      i) This exclusion is available on a facility-wide basis only, not for individual outfalls.
      ii) If industrial materials or activities become exposed to rain, snow, snow melt, or runoff, the conditions for this exclusion no longer apply. In such cases, the discharge becomes subject to enforcement for un-permitted discharge. Any conditionally exempt discharger who

anticipates changes in circumstances must apply for and obtain permit coverage before the change of circumstances.

iii) The department or agent retains the authority to make a determination that the "no exposure" conditional exclusion no longer applies and require the owner or operator to obtain permit coverage.

5. **Revocation of Permit Coverage** - The department may revoke a permit registrant's coverage under the permit pursuant to OAR 340-045-033(10).

SCHEDULE A
STORMWATER POLLUTION CONTROL PLAN

1. **Preparation and Implementation of Stormwater Pollution Control Plan (SWPCP)**
   a) The permit registrant must ensure that the SWPCP contains the applicable information described in condition A.3.
   b) The SWPCP must be prepared by a person knowledgeable in stormwater management and familiar with the facility.
   c) The name of the person(s) preparing the SWPCP must be included in the plan.
   d) The SWPCP must be signed and certified in accordance with 40 CFR §122.22.
   e) The SWPCP must be implemented according to conditions A.3.c and Schedule C. Failure to implement any portion of the SWPCP constitutes a violation of the permit.
   f) The SWPCP must be kept current and updated as necessary to reflect any changes in facility operation.
   g) A copy of the SWPCP must be kept at the facility and made available upon request to government agencies responsible for stormwater management in the permit registrant's area.

2. **SWPCP Revisions and Actions Plans**
   a) After the permit registration is approved, if the permit registrant proposes to revise its SWPCP or the department or agent require revisions to the SWPCP, the permit registrant must clearly describe these revisions in an Action Plan.
   b) The Action Plan is considered an addendum to the SWPCP and must be prepared in compliance with condition A.1 above.
   c) Within 30 calendar days of making SWPCP revisions, permit registrant must submit an Action Plan to the department or agent for approval. If the department or agent does not comment within 10 business days of receiving the Action Plan, it is deemed approved. Failure to implement any portion of the Action Plan constitutes a violation of the permit.

3. **Required SWPCP Elements**
   a) **Title Page** - The title page of the SWPCP must contain the following information:
      i) Name of the site.
      ii) Name of the site operator or owner.
      iii) Site or file number as indicated on the permit.
      iv) Contact person's name and telephone number.
      v) Physical address, including county, and mailing address if different.

   b) **Site Description** - The SWPCP must contain the following information:
      i) A description of the industrial activities conducted at the site. Include a description of the significant materials (see condition D.3, Definitions) that are stored, used, treated or disposed of in a manner that allows exposure to stormwater. Also describe the methods of storage, usage, treatment or disposal.
      ii) A general location map showing the location of the site in relation to surrounding properties, transportation routes, surface waters and other relevant features.
      iii) A site map including the following:
         (1) drainage patterns;
         (2) drainage and discharge structures (piping, ditches, etc.);
         (3) outline of the drainage area for each stormwater outfall;
         (4) paved areas and buildings within each drainage area;
         (5) areas used for outdoor manufacturing, treatment, storage, or disposal of significant materials;
         (6) existing structural control measures for reducing pollutants in stormwater runoff;

(7) material loading and access areas;
(8) hazardous waste treatment, storage and disposal facilities;
(9) location of wells including waste injection wells, seepage pits, drywells, etc., and
(10) location of springs, wetlands and other surface waterbodies both on site and adjacent to the site.

iv) Estimates of the amount of impervious surface area (including paved areas and building roofs) relative to the total area drained by each stormwater outfall.

v) For each area of the site where a reasonable potential exists for contributing pollutants to stormwater runoff, identify the potential pollutants that could be present in stormwater discharges.

vi) The name(s) of the receiving water(s) for stormwater drainage. If drainage is to a municipal storm sewer system, the name(s) of the ultimate receiving waters and the name of the municipality.

vii) Identification of the discharge outfall(s) and the point(s) where stormwater monitoring will occur as required by Schedule B. If multiple discharge outfalls exist but will not all be monitored, include a description of the outfalls and data or analysis supporting that the outfalls are representative as described in condition B.2.b.

c) **Site Controls** - The permit registrant must develop, implement, and maintain the controls that are appropriate for the site. The purpose of these controls is to eliminate or minimize the exposure of pollutants to stormwater or to remove pollutants from stormwater before it discharges to surface waters. In developing a control strategy, the permit registrant must include the following four (4) types of controls in the SWPCP and describe the specific components of each control:

i) *Stormwater Best Management Practices* - The permit registrant must employ the following types of best management practices that are appropriate for the site. A schedule for implementation of these practices must be included in the SWPCP if the practice has not already been accomplished. This schedule must be consistent with the requirements for implementing the SWPCP in Schedule C of this permit.

(1) Containment - All hazardous substances (see condition D.3, Definitions) must be stored within berms or other secondary containment devices to prevent leaks and spills from contaminating stormwater. If the use of berms or secondary containment devices is not possible, then hazardous substances must be stored in areas that do not drain to the storm sewer system.

(2) Oil and Grease - Oil/water separators, booms, skimmers or other methods must be employed to eliminate or minimize oil and grease contamination of stormwater discharges.

(3) Waste Chemicals and Material Disposal - Wastes must be recycled or properly disposed of in a manner to eliminate or minimize exposure of pollutants to stormwater. All waste contained in bins or dumpsters where there is a potential for drainage of stormwater through the waste must be covered to prevent exposure of stormwater to these pollutants. Acceptable covers include, but are not limited to, storage of bins or dumpsters under roofed areas and use of lids or temporary covers such as tarps.

(4) Erosion and Sediment Control - Erosion control methods such as vegetating exposed areas, graveling or paving must be employed to minimize erosion of soil at the site. Sediment control methods such as detention facilities, vegetated filter strips, bioswales, or other permanent erosion or sediment controls must be employed to minimize sediment loads in stormwater discharges. For activities that involve land disturbance, the permit registrant must contact the local municipality to determine if there are other applicable requirements.

(5) Debris Control - Screens, booms, settling ponds, or other methods must be employed to eliminate or minimize debris in stormwater discharges.

(6) Stormwater Diversion - Stormwater must be diverted away from fueling, manufacturing, treatment, storage, and disposal areas to prevent exposure of uncontaminated stormwater to potential pollutants.

(7) Covering Activities – Fixed fueling, manufacturing, treatment, storage, and disposal areas must be covered to prevent exposure of stormwater to potential pollutants. Acceptable covers include, but are not limited to, permanent structures such as roofs or buildings and temporary covers such as tarps.

(8) Housekeeping - Areas that may contribute pollutants to stormwater must be kept clean. Sweeping, litter pick-up, prompt clean up of spills and leaks, and proper maintenance of vehicles must be employed to eliminate or minimize exposure of stormwater to pollutants.

ii) *Spill Prevention and Response Procedure* - Permit registrant must include in the SWPCP methods to prevent spills along with clean-up and notification procedures. These methods and procedures must be made available to appropriate personnel. The required clean-up material must be on-site or readily available and the location of materials must either be shown on the site drawings or indicated in the text of the SWPCP. Spills prevention plans required by other regulations may be substituted for this provision providing that stormwater management concerns are adequately addressed.

iii) *Preventative Maintenance* - Permit registrant must include in the SWPCP a preventative maintenance program to ensure the effective operation of all stormwater best management practices. At a minimum the program must include:

(1) Monthly inspections of areas where potential spills of significant materials or industrial activities could impact stormwater runoff.

(2) Monthly inspections of stormwater control measures, structures, catch basins, and treatment facilities.

(3) Cleaning, maintenance or repair of all materials handling and storage areas and all stormwater control measures, structures, catch basins, and treatment facilities as needed upon discovery. Cleaning, maintenance, and repair of such systems must be performed in such a manner as to prevent the discharge of pollution.

iv) *Employee Education* - Permit registrant must develop and maintain an employee orientation and education program to inform personnel of the components and goals of the SWPCP. The program must also address spill response procedures and the necessity of good housekeeping practices. A schedule for employee education must be included in the SWPCP. The education and training must occur within 30 calendar days of hiring an employee who works in areas where stormwater is exposed to industrial activities or conducts duties related to the implementation of the SWPCP, and annually thereafter.

d) **Record Keeping and Internal Reporting Procedures** - Permit registrant must record and maintain at the facility the following information, which does not need to be submitted to the department, agent or other government agencies, unless it is requested.

i) Inspection, maintenance, repair and education activities as required by the SWPCP.

ii) Spills or leaks of significant materials (See condition D.3, Definitions) that impacted or had the potential to impact stormwater or surface waters. Include the corrective actions to clean up the spill or leak as well as measures to prevent future problems of the same nature.

ADDITIONAL REQUIREMENTS

4. **Non-Stormwater Discharges**
   a) The following non-stormwater discharges are authorized by this permit:
      i) Discharges from fire-fighting activities.
      ii) Fire hydrant flushings.
      iii) Potable water, including water line flushings.
      iv) Uncontaminated air conditioning condensate.
      v) Irrigation drainage.
      vi) Landscape watering, provided that all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions.
      vii) Pavement wash waters where no detergents or hot water are used, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed), and surfaces are swept before washing.
      viii) Routine external building washdown that does not use detergents or hot water.
      ix) Uncontaminated ground water or spring water.
      x) Foundation or footing drains where flows are not contaminated with process materials.
      xi) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).
   b) Piping and drainage systems for interior floor drains and process wastewater discharge points must be separated from the storm drainage system to prevent inadvertent discharge of pollutants to waters of the state. Discharge from floor drains to the stormwater drainage system is a violation of this permit.
   c) Any other wastewater discharge or disposal, including stormwater mixed with wastewater, must be permitted in a separate permit, unless the wastewater is reused or recycled without discharge or disposal, or discharged to the sanitary sewer with approval from the local sanitary authority.

5. **Water Quality Standards**
   a) The permit registrant must not cause a violation of instream water quality standards as established in OAR 340-041.
   b) If the permit registrant develops, implements, and revises its SWPCP in compliance with Schedule A of this permit, the department presumes that the discharges authorized by this permit will comply with instream water quality standards unless the department obtains evidence to the contrary. Coincident samples of the discharge and at upstream and downstream locations in the receiving waterbody must be collected to establish a violation of an instream water quality standard is caused by the discharge.
   c) In instances where the department determines that the permit registrant's stormwater discharges are not complying with instream water quality standards, the department may take enforcement action for violations of the permit and will require the permit registrant to do one or more of the following:
      i) Develop and implement an Action Plan that describes additional effective BMPs to address the parameters of concern and their locations at the site;
      ii) Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is meeting water quality standards; or
      iii) Curtail stormwater pollutant discharges to the extent possible and submit an individual permit application.

6. **Discharges to Impaired Waterbodies** - If a Total Maximum Daily Load (TMDL) Order (see condition D.3, Definitions) is established and the discharge from a permitted source is assigned a

waste load allocation or is required to meet other conditions in the TMDL Order, then an application for an individual or different general permit or other appropriate tools may be required to address the allocation or other requirements.

CODE OF FEDERAL REGULATION STORMWATER DISCHARGE LIMITATIONS

7. **Effluent Limitations** - The permit registrant with the following activities must comply with the applicable limitations:

CFR Industry		Parameter	Limitation	
Category	**Subcategory**			
Cement manufacturing (40 CFR §411)	Materials storage piles runoff	pH	6.0 - 9.0 SU	
		Total Suspended Solids (TSS)	50 mg/l	
Steam powered electric power generating (40 CFR §423)	Coal pile runoff	TSS	50 mg/l, Daily Maximum	
Paving and roofing materials (tars and asphalt) (40 CFR §443)	Runoff from manufacturing of asphalt paving or roofing emulsion	Oil & Grease	15 mg/l, Daily Maximum	10 mg/l, 30 Day Average
		pH	6.0 - 9.0 SU	

STORMWATER DISCHARGE BENCHMARKS

8. **Benchmarks** - Benchmarks are guideline concentrations, not limitations. They are designed to assist the permit registrant in determining whether their SWPCP is effectively reducing pollutant concentrations in stormwater discharged from the site. For facilities that are subject to federal limitations, benchmarks apply to only those pollutants that are not limited by the federal regulations. See condition A.7 for a list of facilities subject to federal limitations.

   The following benchmarks apply to each point source discharge of stormwater associated with industrial activity:

Parameter	Benchmark
Total Copper	0.1 mg/l
Total Lead	0.4 mg/l
Total Zinc	0.6 mg/l
pH*	5.5 – 9.0 SU
Total Suspended Solids*	130 mg/l
Total Oil & Grease*	10 mg/l
E. coli**	406 counts/100 ml
Floating Solids (associated with industrial activities)	No Visible Discharge
Oil & Grease Sheen	No Visible Sheen

* See condition A.7 for list of facilities subject to federal limitations.

**The benchmark for E. coli applies only to landfills, if septage and sewage biosolids are disposed at the site, and sewage treatment plants.

9. **Response to a Benchmark Exceedance**
   a) If a stormwater sampling result exceeds any of the benchmark values, the permit registrant must, within 30 calendar days of receiving the sampling results, investigate the cause of the elevated pollutant levels, review the SWPCP and submit an Action Plan for department or agent approval.
   b) The purpose of this review is to determine if:
      i) The SWPCP is being followed;
      ii) There are alternative methods for implementing the existing site controls identified in the SWPCP;
      iii) The benchmark exceedance resulted from background or natural conditions not associated with industrial activities at the site; and
      iv) Additional effective site controls are needed to address the parameters of concern.
   c) The Action Plan must contain the following, unless condition A.9.d applies:
      i) The results of the review;
      ii) The corrective actions the permit registrant will take to address the benchmark exceedance; and
      iii) An implementation schedule including alternative methods for implementing existing site controls or methods for implementing additional effective site controls, if the site controls have not already been implemented.
   d) If the permit registrant believes that the benchmark exceedance resulted from natural or

background conditions, the Action Plan must propose a sampling plan and methodology for demonstrating that the elevated pollutant levels are due to background or natural conditions.

e) If the department or agent does not comment on the Action Plan within 10 business days of its receipt, it is deemed approved. The department or agent's approval of the Action Plan does not constitute compliance with this permit.

f) Upon approval, the permit registrant must implement the corrective actions identified in the Action Plan within 60 calendar days, unless otherwise approved by the department or agent.

g) If the department or agent affirms the assertion that background or natural conditions contributed to the benchmark exceedance, the permit registrant is not required to make this demonstration again during the term of this permit.

10. **Benchmark Compliance Evaluation**

a) By June 30th of the 4th year of permit coverage, the permit registrant must evaluate the last four samples collected from each outfall monitored and determine whether the geometric mean of the samples exceeds benchmark(s). This condition is not applicable to a permit registrant with a monitoring waiver as described in condition B.3.

b) The permit registrant must report this information in a Discharge Monitoring Report (DMR) and submit the DMR to the department or agent by July 31st of the 4th year of permit coverage as described in condition B.4.a.

c) If the geometric mean of the samples exceeds benchmark(s), the department will revoke the permit registrant's coverage under this permit and will require the permit registrant to apply for an individual permit pursuant to OAR 340-045-0033(10) and OAR 340-045-0060.

SCHEDULE B
MONITORING AND REPORTING REQUIREMENTS

1. **Minimum Monitoring Requirements** - All permit registrants must monitor stormwater associated with industrial activity for the following:

GRAB SAMPLES OF STORMWATER*	
Parameter	**Frequency****
Total Copper	Four times per Year
Total Lead	Four times per Year
Total Zinc	Four times per Year
pH	Four times per Year
Total Suspended Solids	Four times per Year
Total Oil & Grease	Four times per Year
E. coli***	Four times per Year

* For each outfall monitored, the permit registrant may collect a single grab sample or a series of equal volume grab samples. Samples must be collected from the same storm event.

** The permit registrant is allowed to collect more samples than the minimum frequency requires and must report this data.

***The monitoring for E. coli applies only to landfills, if septage and sewage biosolids are disposed at the site, and sewage treatment plants.

VISUAL MONITORING OF STORMWATER	
Parameter	**Frequency**
Floating Solids (associated with industrial activities)	Once per Month (when discharging)
Oil & Grease Sheen	Once per Month (when discharging)

2. **Grab Sampling and Visual Monitoring Procedures and Locations** - The following requirements apply to monitoring conducted in compliance with condition B.1 above.

   a) **Grab Sampling and Visual Monitoring Methodology** - The monitoring period is from July 1 to June 30th. Grab samples must be representative of the discharge and must be taken at least 14 calendar days apart. Two samples must be collected before December 31, and two samples must be collected after January 1. Time or flow-weighted compositing of samples may be used as an alternative to grab samples, except when monitoring for pH, oil and grease, and E. coli. Visual monitoring must occur at outfall(s) or discharge point(s) identified in the SWPCP as outfall(s) or point(s) where stormwater monitoring will occur.

   b) **Multiple Point Source Discharges** - Each stormwater outfall must be monitored unless:
      i) The outfall serves an area with no exposure of stormwater to industrial activities; or
      ii) The outfall has effluent that is substantially similar to the effluent(s) of a monitored outfall and the same BMPs are implemented and maintained at the similar outfalls or drainage areas that lead to the outfalls. Substantially similar effluent(s) are discharges from drainage areas serving comparable activities where the discharges are expected to be similar in composition. The determination of substantial similarity or effluent(s) must be based on past monitoring or an analysis of industrial activities and site

characteristics. The data or analysis supporting that the outfalls are representative must be included in the SWPCP as described in A.3.b.vii.

iii) If sampling points are modified, permit registrants must notify the department or agent and submit an Action Plan as described in condition A.2.c.

c) **Monitoring Location** - All samples must be taken at monitoring points specified in the SWPCP before the stormwater joins or is diluted by any other wastestream, body of water or substance, unless otherwise approved in writing by the department.

d) **Sampling Variance**

i) Permit registrants may request a sampling variance for missed samples if one of the following criteria is met:

a) State or federal authorities declared the year a drought year.

b) Demonstrate that rainfall in the area where the permit registrant's facility is located was 20% or more below the three-year average rainfall for that area.

c) Demonstrate to the department or agent's satisfaction that samples were unable to be collected due to the infrequency of storm events of sufficient magnitude to produce run-off. Supporting data and analysis must be submitted to the department or agent.

ii) Permit registrants must submit to the department or agent a written request for a sampling variance by July 31st of the monitoring year in which the missed sampling occurred.

3. **Monitoring Waiver**

a) **Visual Observations** - There is no reduction allowed of the required visual observations.

b) **Grab Samples** - If at least four consecutive sampling results meet the benchmarks specified in condition A.8, the permit registrant is not required to collect grab samples for the remainder of the permit term. Where the permit registrant demonstrates to the department or agent's satisfaction that a benchmark exceedance resulted from background or natural conditions as described in condition A.9, the department or agent will consider these samples as meeting the benchmark(s) for the purposes of granting a monitoring waiver. There is no reduction in monitoring allowed for facilities subject to CFR limitations as described in condition A.7.

i) Results from sampling events cannot be averaged to meet the benchmarks.

ii) Monitoring waivers may be allowed for individual parameters.

iii) The permit registrant must submit to the department or agent a request to exercise the monitoring waiver that includes the analytical results from the four sampling events. If the department or agent does not comment within 30 calendar days, the monitoring waiver is deemed approved.

c) **Revocation of Monitoring Waiver**

i) The permit registrant must conduct monitoring as specified in condition B.1 if:

a) The department or agent determines that prior monitoring efforts used to establish the monitoring waiver were improper or sampling results were incorrect;

b) The department, agent or permit registrant determines that changes to site conditions are likely to affect stormwater discharge characteristics, or

c) The department, agent or permit registrant conducts additional monitoring and the sampling results exceed benchmark(s).

ii) The department or agent will notify the permit registrant in writing if the monitoring waiver is revoked.

4. **Monitoring Reporting Requirements** - The permit registrant must submit the following to the appropriate DEQ regional office or agent:

   a) **Monitoring Data** - The permit registrant must submit by July 31st of each year grab sampling and visual monitoring results for the previous monitoring period (July 1 - June 30). The permit registrant must also report the minimum detection levels and analytical methods for the parameters analyzed. Non-detections must be reported as "ND" with the detection limit in mg/L parentheses, e.g., ND (0.005 mg/L). In calculating the geometric mean as described in condition A.10, one-half of the detection limits must be used for non-detections.

   b) **Report Forms** - The permit registrant must use a department-approved Discharge Monitoring Report (DMR) form for both visual and analytical monitoring results.

SCHEDULE C
COMPLIANCE CONDITIONS AND SCHEDULES

1. **An Existing Permit Registrant** that is either renewing or transferring coverage under the permit where there are no changes to operation or industrial type (for a facility operating under an NPDES stormwater discharge permit prior to July 1, 2007):

   a) Not later than 90 calendar days after renewing or transferring coverage under the permit, permit registrant must implement new site controls identified in the SWPCP to meet new permit requirements.

   b) Site controls that are developed to meet new permit requirements that require capital improvements (see Schedule D.3, Definitions) must be completed in accordance with the schedule set forth in the SWPCP, but must be completed within two years of renewing or transferring coverage under this permit.

2. **A New Permit Registrant with an Existing Facility** (for a facility operating before July 1, 2007, without an NPDES stormwater discharge permit):

   a) Not later than 90 calendar days after obtaining permit coverage, the permit registrant must implement site controls identified in the SWPCP to meet the new permit requirements.

   b) Site controls that are developed to meet new permit requirements that require capital improvements (see Schedule D.3, Definitions) must be completed in accordance with the schedule set forth in the SWPCP, but must be completed within two years of obtaining permit coverage.

3. **A New Permit Registrant with a New Facility** (for a facility beginning operation after July 1, 2007 without an NPDES stormwater discharge permit):

   a) A permit registrant must begin implementation of the SWPCP before starting operations. Not later than 90 calendar days after obtaining permit coverage, the permit registrant must fully implement site controls identified in the SWPCP.

   b) Site controls that require capital improvements (see Schedule D.3, Definitions), must be completed in accordance with the schedule set forth in the SWPCP, but must be completed within two years of obtaining permit coverage.

4. **A New Permit Registrant Discharging to Clackamas River, McKenzie River above Hayden Bridge (River Mile 15) or North Santiam River** (For potential or existing dischargers that did not have a permit prior to January 28, 1994, and existing dischargers that have a NPDES stormwater discharge permit but request an increased load limitation.)

   a) Not later than 180 calendar days after obtaining permit coverage, permit registrant must submit to the department a monitoring and water quality evaluation program. This program must be effective in evaluating the in-stream impacts of the discharge as required by OAR 340-041-0470.

   b) Within 30 calendar days of department approval, the permit registrant must implement the monitoring and water quality evaluation program.

SCHEDULE D
SPECIAL CONDITIONS

1. **Releases in Excess of Reportable Quantities.** This permit does not relieve the permit registrant of the reporting requirements of 40 CFR §117 Determination of Reportable Quantities for Hazardous Substances and 40 CFR §302 Designation, Reportable Quantities, and Notification.

2. **Availability of SWPCP and Monitoring Data.** The Stormwater Pollution Control Plan (SWPCP) or stormwater monitoring data must be made available to government agencies responsible for stormwater management in the permit registrant's area.

3. **Definitions**

   a) *Action Plan* means an addendum to the SWPCP developed in response to modification to the SWPCP or in response to a benchmark exceedance.

   b) *Capital Improvements* means the following improvements that require capital expenditures:
      i) Treatment best management practices including but not limited to settling basins, oil/water separation equipment, catch basins, grassy swales, detention/retention basins, and media filtration devices.
      ii) Manufacturing modifications that incur capital expenditures, including process changes for reduction of pollutants or wastes at the source.
      iii) Concrete pads, dikes and conveyance or pumping systems utilized for collection and transfer of stormwater to treatment systems.
      iv) Roofs and appropriate covers for manufacturing areas.

   c) *Hazardous Substances* as defined in 40 CFR §302 Designation, Reportable Quantities, and Notification.

   d) *Material Handling Activities* include the storage, loading and unloading, transportation or conveyance of raw material, intermediate product, finished product, by-product or waste product.

   e) *Point Source Discharge* means a discharge from any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, or conduit.

   f) *Significant Materials* includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with stormwater discharges.

   g) *Site Controls* is analogous to Best Management Practices.

   h) *Stormwater Associated With Industrial Activity* includes, but is not limited to, stormwater discharges from the following:
      - Industrial plant yards

- Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility
- Material handling sites (Material handling activities include the storage, loading and unloading, transportation or conveyance of raw material, intermediate product, finished product, by-product or waste product.)
- Refuse sites
- Sites used for the application or disposal of process waste waters (as defined in 40 CFR § 401)
- Sites used for storage or maintenance of material handling equipment
- Sites used for residual treatment, storage, or disposal; shipping and receiving areas
- Manufacturing buildings
- Storage areas (including tank farms) for raw materials, and intermediate and finished products
- Areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with stormwater discharges.

i) *Stormwater Conveyance* means a sewer, ditch, or swale that is designed to carry stormwater; a stormwater conveyance may also be referred to as a storm drain or storm sewer.

j) *Total Maximum Daily Load (TMDL)* is the sum of the individual Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for nonpoint sources and background. If a receiving water body has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

4. **Local Public Agencies Acting as the Department's Agent**

The department authorizes local public agencies to act as its agent in implementing this permit if they entered into a Memorandum of Agreement (MOA). The agent may be authorized to conduct the following activities, including but not limited to: application review and approval, inspections, monitoring data review, stormwater and wastewater monitoring, SWPCP review, and verification and approval of no-exposure certifications. Where the department has entered into such an agreement, the department or its agent must notify the permit registrant of where to submit no-exposure certifications, and other notifications or correspondence associated with this permit. Annual discharge monitoring reports, including analytical monitoring data and visual monitoring results, SWPCPs and Actions Plans must be submitted to both the department and the agent.

SCHEDULE F
NPDES GENERAL CONDITIONS – INDUSTRIAL FACILITIES

SECTION A. STANDARD CONDITIONS

1. Duty to Comply
The permit registrant must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Oregon Revised Statutes (ORS) 468B.025 and 40 CFR 122.41(a) and is grounds for enforcement action; for permit termination, revocation, reissuance, or modification; or for denial of a permit renewal application.

2. Penalties for Water Pollution and Permit Condition Violations
ORS 468.140 allows the department to impose civil penalties up to $10,000 per day for violation of a term, condition, or requirement of a permit. Additionally, 40 CFR 122.41, modified by 40 CFR 19.4, provides that any person who violates any permit condition, term, or requirement may be subject to a federal civil penalty not to exceed $32,500 per day of each violation.

Under ORS 468.943 and 40 CFR 122.41, modified by 40 CFR 19.4, unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to $32,500 or by imprisonment for not more than one year, or by both. Each day on which a violation occurs or continues is a separately punishable offense.

Under ORS 468.946, a person who knowingly discharges, places or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state, is subject to a Class B felony punishable by a fine not to exceed $200,000 and up to 10 years in prison. Additionally, under 40 CFR §122.41(a) any person who knowingly discharges, places, or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state is subject to a federal civil penalty not to exceed $100,000, and up to 6 years in prison.

3. Duty to Mitigate
The permit registrant must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of the Department, the permit registrant must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

4. Duty to Reapply
If the permit registrant wishes to continue an activity regulated by this permit after the expiration date of this permit, the permit registrant must apply to have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

5. Permit Actions
This permit may be modified, suspended, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any term, condition, or requirement of this permit, a rule, or a statute;
b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts;
c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
d. The permit registrant is identified as a Designated Management Agency or allocated a wasteload under a Total Maximum Daily Load (TMDL);
e. New information or regulations;
f. Modification of compliance schedules;
g. Requirements of permit re-opener conditions;
h. Correction of technical mistakes made in determining permit conditions;
i. Determination that the permitted activity endangers human health or the environment, or
j. Other causes as specified in 40 CFR §§122.62, 122.64, and 124.5.

The filing of a request by the permit registrant for a permit modification or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants
The permit registrant must comply with any applicable effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. Property Rights
The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

8. Permit References
Except for effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance
The permit registrant must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permit registrant to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permit registrant only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity
For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permit registrant must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permit registrant in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities
   a. Definitions
      (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The term "bypass" does not include nonuse of singular or multiple units or processes of a treatment works when the nonuse is insignificant to the quality or quantity of the effluent produced by the treatment works. The term "bypass" does not apply if the diversion does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation.
      (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities or treatment processes which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

   b. Prohibition of bypass.
      (1) Bypass is prohibited unless:
         (a) Bypass was necessary to prevent loss of life, personal injury, or severe property damage;
         (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
         (c) The permit registrant submitted notices and requests as required under General Condition B.3.c.
      (2) The Director may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the Director determines that it will meet the three conditions listed above in General Condition B.3.b.(1).

c. Notice and request for bypass.
   (1) Anticipated bypass. If the permit registrant knows in advance of the need for a bypass, it must submit prior written notice, if possible at least ten days before the date of the bypass.
   (2) Unanticipated bypass. The permit registrant must submit notice of an unanticipated bypass as required in General Condition D.5.

4. Upset
   a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permit registrant. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

   b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of General Condition B.4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

   c. Conditions necessary for a demonstration of upset. A permit registrant who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      (1) An upset occurred and that the permit registrant can identify the causes(s) of the upset;
      (2) The permitted facility was at the time being properly operated;
      (3) The permit registrant submitted notice of the upset as required in General Condition D.5, hereof (24-hour notice); and
      (4) The permit registrant complied with any remedial measures required under General Condition A.3 hereof.

   d. Burden of proof. In any enforcement proceeding the permit registrant seeking to establish the occurrence of an upset has the burden of proof.

5. Treatment of Single Operational Event
   For purposes of this permit, A Single Operational Event which leads to simultaneous violations of more than one pollutant parameter must be treated as a single violation. A single operational event is an exceptional incident which causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational event does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational event is a violation.

6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations
   a. Definitions
      (1) "Overflow" means the diversion and discharge of waste streams from any portion of the wastewater conveyance system including pump stations, through a designed overflow device or structure, other than discharges to the wastewater treatment facility.
      (2) "Severe property damage" means substantial physical damage to property, damage to the conveyance system or pump station which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an overflow.
      (3) "Uncontrolled overflow" means the diversion of waste streams other than through a designed overflow device or structure, for example to overflowing manholes or overflowing into residences, commercial establishments, or industries that may be connected to a conveyance system.

   b. Prohibition of overflows. Overflows are prohibited unless:
      (1) Overflows were unavoidable to prevent an uncontrolled overflow, loss of life, personal injury, or severe property damage;
      (2) There were no feasible alternatives to the overflows, such as the use of auxiliary pumping or conveyance systems, or maximization of conveyance system storage; and
      (3) The overflows are the result of an upset as defined in General Condition B.4. and meeting all requirements of this condition.

   c. Uncontrolled overflows are prohibited where wastewater is likely to escape or be carried into the waters of the State by any means.

d. Reporting required. Unless otherwise specified in writing by the Department, all overflows and uncontrolled overflows must be reported orally to the Department within 24 hours from the time the permit registrant becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.

7. Public Notification of Effluent Violation or Overflow
If effluent limitations specified in this permit are exceeded or an overflow occurs, upon request by the Department, the permit registrant must take such steps as are necessary to alert the public about the extent and nature of the discharge. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

8. Removed Substances
Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering public waters, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling
Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of the Director.

2. Flow Measurements
Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring Procedures
Monitoring must be conducted according to test procedures approved under 40 CFR §136, unless other test procedures have been specified in this permit.

4. Penalties of Tampering
The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit must, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than $20,000 per day of violation, or by imprisonment of not more than four years or both.

5. Reporting of Monitoring Results
Monitoring results must be summarized each month on a Discharge Monitoring Report form approved by the Department. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

6. Additional Monitoring by the Permit registrant
If the permit registrant monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR §136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (e.g., Total Chlorine Residual), only the average daily value must be recorded unless otherwise specified in this permit.

7. Averaging of Measurements
Calculations for all limitations which require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.

8. Retention of Records
Except for records of monitoring information required by this permit related to the permit registrant's sewage sludge use and disposal activities, which must be retained for a period of at least five years (or longer as required by 40 CFR §503), the permit registrant must retain records of all monitoring information, including all calibration and maintenance records of all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

9. Records Contents
Records of monitoring information must include:
a. The date, exact place, time and methods of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

10. Inspection and Entry
The permit registrant must allow the Director, or an authorized representative upon the presentation of credentials to:
a. Enter upon the permit registrant's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes
The permit registrant must comply with Oregon Administrative Rules (OAR) 340, Division 052, "Review of Plans and Specifications". Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers must be commenced until the plans and specifications are submitted to and approved by the Department. The permit registrant must give notice to the Department as soon as possible of any planned physical alternations or additions to the permitted facility.

2. Anticipated Noncompliance
The permit registrant must give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers
This permit may be transferred to a new permit registrant provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit must be transferred to a third party without prior written approval from the Director. The permit registrant must notify the Department when a transfer of property interest takes place.

4. Compliance Schedule
Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting
The permit registrant must report any noncompliance which may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours, unless otherwise specified in this permit, from the time the permit registrant becomes

aware of the circumstances. During normal business hours, the Department's Regional office must be called. Outside of normal business hours, the Department must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

A written submission must also be provided within 5 days of the time the permit registrant becomes aware of the circumstances. If the permit registrant is establishing an affirmative defense of upset or bypass to any offense under ORS 468.922 to 468.946, and in which case if the original reporting notice was oral, delivered written notice must be made to the Department or other agency with regulatory jurisdiction within 4 (four) calendar days. The written submission must contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected;
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
e. Public notification steps taken, pursuant to General Condition B.7.

The following must be included as information which must be reported within 24 hours under this paragraph:

a. Any unanticipated bypass which exceeds any effluent limitation in this permit.
b. Any upset which exceeds any effluent limitation in this permit.
c. Violation of maximum daily discharge limitation for any of the pollutants listed by the Director in this permit.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

6. Other Noncompliance

The permit registrant must report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports must contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. Duty to Provide Information

The permit registrant must furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit. The permit registrant must also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permit registrant becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it must promptly submit such facts or information.

8. Signatory Requirements

All applications, reports or information submitted to the Department must be signed and certified in accordance with 40 CFR §122.22.

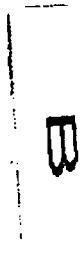
9. Falsification of Reports

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $100,000 per violation and up to 5 years in prison.

SECTION E. DEFINITIONS

1. BOD means five-day biochemical oxygen demand.
2. TSS means total suspended solids.
3. mg/l means milligrams per liter.
4. kg means kilograms.
5. m^3/d means cubic meters per day.
6. MGD means million gallons per day.
7. Composite sample means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.

8. FC means fecal coliform bacteria.
9. Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR §125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
10. CBOD means five day carbonaceous biochemical oxygen demand.
11. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
12. Quarter means January through March, April through June, July through September, or October through December.
13. Month means calendar month.
14. Week means a calendar week of Sunday through Saturday.
15. Total residual chlorine means combined chlorine forms plus free residual chlorine.
16. The term "bacteria" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.
17. POTW means a publicly owned treatment works.



IPDES #1200-Z General Permit

Discharge Monitoring Report

Submit report by July 31st for the previous year's data (i.e., July 1 - June 30) to Oregon DEQ

Legal Name: ConocoPhillips

Common Name: ConocoPhillips Terminal

Facility Location: 5528 NW Doane Ave

Site/File ID#: 90845

County: Multnomah

Month/Quarter/Year 00/ 00/ 00

Monitoring for Oil/Water Separator 001

Day	Oil and Grease (mg/L)	Oil and Grease Visible Sheen	Floating Solids (associated with industry)	Flow	Total Copper	Total Lead	Total Zinc	pH	Total Suspended Solids
	Four times per year	Monthly visual observation when discharging	Once per month when discharging	Daily estimate, when discharging	Four times per year	Four times per year	Four times per year	Four times per year	Four times per year
Limit	10 mg/L	No visible sheen	No visible discharge	No limit	0.1 m/L	0.4 m/L	0.6 mg/L	5.5 - 9.0 SU	130 mg/L
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I certify, under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature of Responsible Official: _____

Name and Title (Please Print): _____

Date of Signature: _____ Telephone: _____

COPPOR0000737

IPDES #1200-Z General Permit

Discharge Monitoring Report

Submit report by July 31st for the previous year's data (i.e., July 1 - June 30) to Oregon DEQ

Legal Name: ConocoPhillips

Common Name: ConocoPhillips Terminal

Facility Location: 5528 NW Doane Ave

Site/File ID#: 90845

County: Multnomah

Month/Quarter/Year 00/ 00/ 00

Monitoring for Oil/Water Separator 002

Day	Oil and Grease (mg/L)	Oil and Grease Visible Sheen	Floating Solids (associated with industry)	Flow	Total Copper	Total Lead	Total Zinc	pH	Total Suspended Solids
	Four times per year	Monthly visual observation when discharging	Once per month when discharging	Daily estimate, when discharging	Four times per year	Four times per year	Four times per year	Four times per year	Four times per year
Limit	10 mg/L	No visible sheen	No visible discharge	No limit	0.1 m/L	0.4 m/L	0.6 mg/L	5.5 - 9.0 SU	130 mg/L
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I certify, under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature of Responsible Official: _____

Name and Title (Please Print): _____

Date of Signature: _____ Telephone: _____

COPPOR0000738

PDES #1200-Z General Permit

Discharge Monitoring Report

Submit report by July 31st for the previous year's data (i.e., July 1 - June 30) to Oregon DEQ

Legal Name: ConocoPhillips

Common Name: ConocoPhillips Terminal

Facility Location: 5528 NW Doane Ave

Site/File ID#: 90845

County: Multnomah

Month/Quarter/Year 00/ 00/ 00

Monitoring for Oil/Water Separator 004

Day	Oil and Grease (mg/L)	Oil and Grease Visible Sheen	Floating Solids (associated with industry)	Flow	Total Copper	Total Lead	Total Zinc	pH	Total Suspended Solids
	Four times per year	Monthly visual observation when discharging	Once per month when discharging	Daily estimate, when discharging	Four times per year	Four times per year	Four times per year	Four times per year	Four times per year
Limit	10 mg/L	No visible sheen	No visible discharge	No limit	0.1 m/L	0.4 m/L	0.6 mg/L	5.5 - 9.0 SU	130 mg/L
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I certify, under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature of Responsible Official: _____

Name and Title (Please Print): _____

Date of Signature: _____ Telephone: _____

COPPOR0000739

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: ConocoPhillips Inc, Portland Terminal

PERMIT NUMBER: 400.181

REPORT DUE DATE: _____

SAMPLING PERIOD: _____

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Date Entered
	Entered By:
Comments:	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total)[1]		mg/L	2	N/A	N/A	
HEM Oil & Grease (Non-Polar)		mg/L		100 mg/L	N/A	
HEM Oil & Grease (Polar)		mg/L		500 mg/L	N/A	
pH		SU		5.5 - 11.5	N/A	
BTEX		ug/L				

1. If the value of HEM Oil and Grease Total is greater than 100 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____